

**ASSESSMENT OF THE FACTORS INFLUENCING LOW ACADEMIC  
PERFORMANCE IN FINAL NURSING EXAMINATIONS: A CASE OF  
CERTIFICATE AND DIPLOMA PROGRAMMES IN EASTERN ZONE,  
TANZANIA**

**HAPPY HOSIANA MASENGA**

**A DISSERTATION SUBMITTED IN FULFILLMENT OF THE  
REQUIREMENTS FOR THE MASTER DEGREE OF EDUCATION IN  
ADMINISTRATION, PLANNING AND POLICY STUDIES OF THE OPEN  
UNIVERSITY OF TANZANIA**

**2015**

**CERTIFICATION**

The undersigned certifies that has read and hereby recommend for analysis of a dissertation entitled **Assessment of The Factors Influencing Low Academic Performance in Final Nursing Examinations: A Case of Certificate and Diploma Programmes in Eastern Zone, Tanzania** in the fulfillment of the requirement for the Master Degree of Education in Administration, Planning and Policy Studies (MEDAPPS) of The Open University of Tanzania.

.....  
**Dr. Emanuel Patroba Mhache**

**Supervisor**

.....  
Date

**COPYRIGHT**

No part of this dissertation may be reproduced, stored in any retrieved system or transmitted in any form by any means, electronic, mechanical, photocopying or otherwise, except for short extract for research , private study or fair dealings with an acknowledgement without written permission of the author or The Open University of Tanzania on behalf.

### **DECLARATION**

I, **Happy Hosiana Masenga**, do hereby declare that, this work is the product of my own effort for the completion of Master's degree of Education in Administration Planning and Policy Studies at The Open University of Tanzania. It has never been presented to any University or Institution for any academic award.

.....

Signature

.....

Date

**DEDICATION**

I dedicate this work to my husband Mr. Joseph Suiting Kawiche, who always gave me moral support and pray for achievement; as well as to my daughter's Irene and Sekunda, and my son Davis for missing me at home during my studies period.

## **ACKNOWLEDGEMENT**

I would like to thank the following people who in many ways contributed to making this work successful. First and foremost my supervisor, Dr. Emmanuel Mhache for his patience, encouragement and moral support. He was tirelessly explained very difficult concepts in a very simple ways. I respect and appreciate his contribution towards my achievement. I would also like to thank Dr. Khairunisa Dhamani who led me through the first stages of my research work on how to construct the concept note, and Dr. Hadija Malima for her valuable comments. It will be unfair to forget the effort made by Mr. Gustav Moyo who read through my work, provide constructive opinions and encouraged me not to give up.

I am grateful to my office leader, Mrs Lena Mfalila, who always encouraged me to go to school and for releasing me to take time off from work to study. I thank my employer, the Ministry of Health and Social Welfare –Permanent Secretary particularly, for sponsoring me to study at the Open University of Tanzania; without him I would not have managed to accomplish my study. Further, to my colleagues at work I always remember their support and encouragement; many thanks to them. I cannot forget to thank my group mates for sharing ideas, continuing encouragement and cooperate during our study period. I thank you all very much.

## **ABSTRACT**

The study on the assessment of the factors influencing low academic performance in final nursing examinations for certificate and diploma programmes was conducted from June to July, 2015 at eastern zone nursing schools. The main objective of this study was to investigate the academic performance of final year examinations nursing students. Specifically, the study ought to identify key factors leading to poor academic performance, examine trends of academic performance for the past three decades and develop current measure for such problem. The study was conducted using descriptive research design where both qualitative and quantitative approaches were employed. A total sample of 138 respondents were sampled. Data were collected using interviews, direct field observation and documentary literature reviews methods were used. SPSS Version 20 and content analysis was used for data analysis where results were presented in tables and figures. Among the major findings includes severe shortage of teaching staff leading to deployment of unqualified teaching staff in the nursing training schools, shortage of relevant books, inadequate time for implementing curriculum, shortage of instructional materials for classroom, clinical and skills laboratory and lack of committed and adequate personnel for clinical teaching and inadequate supervision of student nurses. Based on the findings, the study recommends that, students' performance will be improved by having adequate qualified teaching staff, equip college/schools and clinical setting facilities with all necessary updated learning instructional materials. Moreover, provision of orientation to teaching staff on effective implementation of curriculum would improve performance of students and consideration for changing curriculum duration as measure to provide adequate time for implementing nursing curriculum.

## TABLE OF CONTENTS

<b>CERTIFICATION .....</b>	<b>ii</b>
<b>COPYRIGHT .....</b>	<b>iii</b>
<b>DECLARATION.....</b>	<b>iv</b>
<b>DEDICATION.....</b>	<b>v</b>
<b>ACKNOWLEDGEMENT .....</b>	<b>vi</b>
<b>ABSTRACT .....</b>	<b>vii</b>
<b>LIST OF TABLES .....</b>	<b>xii</b>
<b>LIST OF FIGURES .....</b>	<b>xiii</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>xiv</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Background to the Problem.....	1
1.3 Statement of the Problem .....	6
1.4 Objectives of the Study .....	8
1.4.1 General Objective.....	8
1.4.2 Specific Objectives.....	8
1.4.3 Research Questions .....	8
1.5 Significance of the Study .....	9
1.6 Summary of the Chapter and Organization of the Study .....	10
<b>CHAPTER TWO .....</b>	<b>11</b>
<b>2.0 LITERATURE REVIEW.....</b>	<b>11</b>
2.1 Introduction .....	11



2.2	Definition of terms .....	11
2.2.1	Performance .....	11
2.2.2	Nursing Education.....	12
2.2.3	Final Examination .....	12
2.2.4	Nursing .....	13
2.3	Theoretical Literature Review.....	13
2.3.1	Learning Theory.....	13
2.3.2	Orem's Theory of Self Care Deficit .....	16
2.3.3	Herzberg's two Theories-Hygienic and Motivational Factors .....	19
2.4	Empirical Literature Review .....	21
2.5	Factors Influencing Nursing Academic performance .....	26
2.5.1	Adequacy of Learning Resources.....	26
2.5.2	Qualified Nurse Educator .....	28
2.5.3	Availability of Instructional Materials .....	30
2.6	Research Gap .....	33
2.7	Conceptual Framework .....	34
2.8	Summary .....	37
<b>CHAPTER THREE .....</b>		<b>38</b>
<b>3.0</b>	<b>RESEARCH METHODOLOGY .....</b>	<b>38</b>
3.1	Introduction .....	38
3.2	The Study Area .....	38
3.3	Research Design.....	39
3.4	Research Approach .....	39
3.5	Target Population .....	40

3.6	Sampling Procedure and Sample size .....	40
3.7	Sources of Data .....	42
3.8	Data Collection Methods.....	43
3.9	Data analysis, Interpretation and Presentation .....	45
3.10	Validity and Reliability .....	46
3.11	Summary .....	47
	<b>CHAPTER FOUR.....</b>	<b>48</b>
<b>4.0</b>	<b>PRESENTATION OF THE FINDINGS AND DISCUSSION .....</b>	<b>48</b>
4.1	Introduction.....	48
4.2	Characteristics of the Respondents .....	48
4.2.1	Age of the Respondents.....	49
4.2.2	Teaching Staff .....	50
4.2.3	Respondents' Working Experiences .....	51
4.2.4	Education Level of the Respondents .....	52
4.3	Factors Influencing Poor academic Performance for Nurses' Student .....	53
4.3.1	Clinical Areas Follow-Up and Supervision .....	56
4.3.2	Availability of Clinical Teaching Materials.....	57
4.4	Trends in Nursing Education Performance .....	59
4.4.1	Performance in Continuous Education Assessment.....	59
4.4.2	Assessment Modalities .....	61
4.4.3	Duration for Curriculum Implementation .....	63
4.5	Measures to Address Factors Contributing to Poor Academic Performance of Nurses' Student .....	65
4.6	Discussion of the Findings .....	67

4.6.1	Factors Influences Poor Students' Performance .....	67
4.6.2	Trends of Nursing Education Performance .....	79
4.6.3	Measures to Address Factors Influencing Low Academic Performance .....	82
<b>CHAPTER FIVE.....</b>		<b>86</b>
<b>5.0</b>	<b>SUMMARY, CONCLUSSION AND RECOMMENDATIONS .....</b>	<b>86</b>
5.1	Introduction .....	86
5.2	Summary .....	86
5.3	Conclusion .....	89
5.4	Recommendations .....	90
5.5	Areas for Further Studies .....	92
<b>REFERENCES.....</b>		<b>93</b>
<b>APPENDICES .....</b>		<b>101</b>

## LIST OF TABLES

Table 3.1	Category and Number of Respondents Selected for Study	
	Form .....	41
Table 4.1	Characteristics of the Respondents .....	48
Table 4.2:	Age of Teaching Staff .....	50
Table: 4.3	Gender of the Respondent.....	51
Table: 4.4:	Working Experience .....	52
Table 4.5:	Factors Influencing Low Academic Performance of Nurses	
	Students .....	54
Table 4.6:	Regularly Follow-Up and Teaching in the Clinical Areas.....	56
Table 4.7:	Feedback on Students Evaluation Results .....	60
Table 4.8:	Summary of Final Nursing Examination .....	61
Table 4.9:	Student's Responses on Assessment Modalities.....	61
Table 4.10:	Teaching Staff Responses on Assessment Modalities .....	62
Table 4.11 (a):	Students' Responses on Time Set for Curriculum	
	Implementation .....	63
Table 4:11 (b):	Teachers' Responses on the Time set for Curriculum	
	Implementation .....	64
Table 4.12:	Duration for Curriculum Implementation .....	66

**LIST OF FIGURES**

Figure 2:1: Factors Influencing Low Academic Performance in the Final Nursing Examination.....	35
Figure 4.1: Age of the Nursing Students' Respondents.....	50
Figure 4.2: Respondents Professional Education Level .....	53

### **LIST OF ABBREVIATIONS**

BScN	Bachelor of Science in Nursing
BScNED	Bachelor of Science in Nursing Education
CBET'S	Competencies Based Education Training System
EA	East Africa
EAC	East Africa Community
EN	Enrolled Nurses
FBOs	Faith Based Organizations
GPA	Grade Point Average
JHPIEGO	John Hopkins program for International Education in Gynecology and Obstetrics
MDGs	Millennium Development Goals
MOHSW	Ministry of Health and Social Welfare
NACTE	National Accreditation Council of Technical Education
OSCE	Objective Structured Examination
OSPE	Objective Structured Practical Examination
RN	Registered Nurses
SSPS	Statistical Social Package for the Sciences
TN	Trained Nurses
TNMC	Tanzania Nursing and Midwifery Council
UNESCO	United Nations Educational Scientific and Culture Organization
WHO	World Health Organization

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

#### **1.1 Introduction**

Chapter one provides information of the nursing education system in Tanzania. It starts with the background information on nursing education activities in Tanzania perspective, statement of the problem, objectives, research questions and significance and summary as well as organization of work. The chapter focused to expose the researcher on the origination of the considerable research problem and how systematic it will be investigated.

#### **1.2 Background to the Problem**

Nursing profession faces many challenges in its education system in most African countries. It has many variations due to introduction of changes in curriculum, environment and enrolment criteria. Among others, challenges facing the Nursing and Midwifery Profession are increasing public complaints on the quality of the services provided by this profession resulting in deterioration of the image of nursing in the public domain. Advances in scientific knowledge, technology, changes in social attitudes and values, expanded roles of nursing, pressure within and outside the profession and emerging patterns of new diseases are placing extra burden on the skilled nursing work force, which, unfortunately is also decreasing.

Provision of nursing services is a moral practice as it requires someone to be trained and to develop an inner spirit of care with compassion (Nightingale, 2005). Thus, the

quality of care depends on individual level of education development and practices. The preparation of nurses for health care need a well organized education system to impart the required skills, attitude and knowledge to whoever interested in nursing profession.

Good health and quality nursing care is a fundamental right of all human beings irrespective of gender, age, race, religion, socio-cultural differences, political affiliation, economic and social background (Nightingale, 2005). Basically, the practice of nursing profession is humanitarian in nature and requires one to acquire these attributes in relation to compassionate, respect, empathy, sympathy, trustworthy, accountability and responsibility being an ethical and legal consideration in the provision of care to individuals, families and community at large (Nightingale, 2005). However, the main objective of the Tanzania National Health Policy is to improve the health and well-being of all people, with a focus on those at risk and to encourage the health system to be more responsive to the needs of the people (MoHSW, 2010). This objective cannot be achieved without having appropriately trained nurses and other health workers who are significantly vital for provision of quality health services in health care systems in a collaborative manner in health care facilities.

Historically, nursing education and training in Tanzania started since 1953. It passed through various challenges such as changes of curriculum that would influence improvement in the general practice of nursing education and its output due to lack of access to equity, learning materials such as practical materials and availability of



well equipped tutors. Changes of knowledge based curricula to competence based curricula also has much influences as it required preparation of number of teaching materials, laboratory skills, new assessment methods and general evaluation. The adaptation of the new system which started in 2008 became a great influence in changing the implementation modalities of nursing education curricula and practice. This transition in nursing education system is from traditional-based curriculum to Competence Based Education Training System (CBETS). The process involves development of new curricula, changes of study durations and all forms of learning and teaching. Development of the system has been made to suit the needs of health sector, the labour market demands by increasing the number of admission in the training institutions, legal and professional needs that exist across the world. Thus individuals have to be awarded according to their achievement in learning and competences gained in a variety of different exposures, to opportunities, and competencies in response to nursing education and health care practice (TNMC, 2012).

Competency Based Education System is geared towards preparing a student as a life-long learners, critical thinker, problem solver, and provides wider understanding of nursing education and health care practices (MOHSW, 2009). Employment of the graduates from this system based on their qualifications acquired from accredited and approved program by professional regulatory body. Changes in all forms of learning and teaching in classroom and clinical were dramatically observed whereby skilled laboratory improved to build individual performance. Assessment was mainly on Objective Structured Examination (OSCE) and Objective Structured Practical

Examination (OSPE) considered increasing complaints against the curriculum outcome and their effectiveness in general practice.

Orientation on implementation of the modularized education system to teaching staff on how to organize the modules into a semester is necessary. Students are evaluated through tests, clinical performance, and qualifying examination as stated in the curriculum mode of assessments (MoHSW, 2009). The final nursing examinations conducted to measure student nurses' competences acquired thorough learning process as a one of the obligatory criteria for registration and licensing by the regulatory body according to "The Nursing and Midwifery Act of 2010" (TNMC, 2014). The practice observed to encompass increased failures among the enrolled students in final examination is yet to be known.

Several factors influence the quality of nursing education practice in our context resulting in low performance during the school age and finally increased number of failure in the final nursing examination among student nurses. The situation bring frustration not only to students and parents but also leaves devastating effects on the society. Pre-assumed factors such as curriculum organizational, learning environmental, clinical teaching, socio - economical, personal as well as political oriented factors impair student performance. Limited opportunities for training in the hospital setting, faculty with minimal credentials and too many students in a given program can also play a negative effect on training programs for nurses. (Karani, 2005). Passing examination in nursing training is necessary for applicants to attain registration and license from professional regulatory body.

Recently, John Hopkins program for International Education in Gynecology and Obstetrics (JHPIEGO) in collaboration with the Ministry of Health and Social Welfare (MoHSW) conducted a Pre-service Nursing Midwifery Education Assessment in Kagera and Mara Regions to assess the quality of midwifery pre-service education (in selected Certificate and Diploma Programs schools in Lake Zone) The aim was to see whether practicing professions are adequately prepared with the clinical skills to provide competent nursing and midwifery care in Tanzania's Reproductive and Child Health Services. The study's objectives were to review the pre-service curriculum and the field areas of implementation including administrators, tutors, and clinical instructors as well as employed graduates who qualified under the recent curriculum working in various health facilities. The outcome showed that there were critical shortages in the nursing school's infrastructure, teaching staff and instructors as well. Variation in student instructor ratio as well as variation in opportunities for clinical experience was revealed. Few tutors had access to or attended regular clinical updates (MoHSW, 2014).

However, in Uganda, it was reported that academic performance is affected by a number of factors including admission points, social economic status and school background (Kyoshaba, 2009). Its relationship between admission criteria, former school's background and stability as influences to students' performance in any academic setting where the scholars' basis for entry in nursing school were derived from Advanced level points, diploma points and mature age points. Perhaps, in nursing aspects the trends might be marked out with assumptions to whether there is improper implementation of curriculum, resulting into positive relationship with the

failure of student nurses in their final nursing examination. Since, there was little research done specifically in Tanzania to explore factors influencing mass failure of nurses in final examinations, there is a need to critically examine factors influencing the low academic performance leading to massive failure of nurse's student in their final examinations in Tanzania.

### **1.3 Statement of the Problem**

Nursing education is described as a planned educational programme which provides broad and sound foundation in effective nursing practice (MoHSW, 2009). The role of the nursing education is to prepare student nurses who will be a capable profession in the nursing field. In a situation with deficit of nursing practices there are likely to be problems at subsequent levels of education, especially when students do not acquire adequate knowledge needed to enhance their professional skills that are required in executing basic nursing activities. However, a poorly trained nurse becomes a threat to the patient's (public ) health might be responsible for, and could result in loss of lives and general compound the poor state of the health sector.

Deployments and allocations of work depend on the registration and licensing of individuals who have successively passed in the final nursing examination which is normally conducted at the end of specified training program. Annual average number of graduates ranged from 858 to 1270 in year 2008 recently, the number has increased to 3500 - 4165 per year (TNMC, 2014). This particular group of profession is expected to perform and provide quality services at the required standards as they have been under proper and excellence academic preparation. Retrospectively

evidence shows observed increased higher number of failures in final nursing examination, ranging from 5%-34% in five years span consecutively. Statistically, in 2011 there were 66 (5%) failures out of 1433, in March 2013 the failure rate went up to 432 (34%) out of 1270 for diploma students while in July/August, 2013 were 933 (26%) out of 3565 candidates who sat for examinations. In March 2014, the number dropped to 178 (11%) students out of 1708 (TNMC, 2014). The situation creates many complaints among the stakeholders resulting in negative image towards nursing education system and its practice. It also creates a gap to the expected employment target for nurses.

Despite of all protocols in place, there were observed low performance among student nurses resulting in poor performance in the final nursing examination. Complaints from nurse tutors on the system and its mechanism, perceived low quality in performance of the graduates at work place and decline of the nursing practices aroused stakeholders' concerns on the practice of education system and its awards. The trend was gradually observed with evidence on increased number of failure rate among the certificate and diploma program student nurses in the final nursing examination.

Perhaps, in nursing aspects the trends might be marked out with assumptions to whether there is improper implementation of curriculum, resulting into positive relationship with the failure of student nurses in their final nursing examination. Since, there was little research done specifically in Tanzania to explore factors influencing mass failure of nurses in final examinations, there is a need to critically

examine factors influencing the massive failure of nurse's student in their final examinations in Tanzania.

#### **1.4 Objectives of the Study**

##### **1.4.1 General Objective**

The main objective of this study was to investigate the academic performance of final nursing examinations among student nurses in certificate and diploma program in the Eastern zone.

##### **1.4.2 Specific Objectives**

- i. To identify key factors influencing low academic performance of nursing students in final nursing examination for Certificate and Diploma Program.
- ii. To examine trends in academic performance in the nursing education and final nursing examinations for nurses in Certificate and Diploma Program
- iii. To recommend measures to address factors leading to low academic performance of nurses student in Certificate and Diploma Program towards final year examination.

##### **1.4.3 Research Questions**

- i. What are the key factors influencing low academic performance of nursing students towards final year examination Certificate and Diploma education program?
- ii. What is the magnitude of academic performance of students towards the final examination for Certificate and Diploma education program?

- iii. What measures to be taken to address factors influencing low academic performance to student nurses towards final nursing examinations?

### **1.5 Significance of the Study**

The quality of education is revealed by good performance of the nurse students during the training period and graduate nurses in health care deliveries. Nurses competences are the fundamentals observed within the practice of profession standards. Currently, poor nursing practice are observed with the health care customers, leading to increased public complaints. Thus, the study was expected to provide various sources of observed factors that influence low academic performance in nursing education leading to failure in the final examination. The findings are expected to provide knowledge and understanding of the reasons for low nursing education or academic performance.

Second, for the teaching staff, the study would provide valuable lessons to the current process of modernizing different situation in learning and teaching activities in nursing training institutions in relation to student's performances. It would assist in development and application of different and appropriate teaching and learning modalities and materials that would influence good student performance.

Third, the study findings can be useful to the government of Tanzania through MoHSW as a policy maker, Tanzania Nursing and Midwifery Council (TNMC) as a professional Regulatory Authority and Professional Association as a professional welfare Organ to initiate remedial strategies to implement, monitor and evaluate

nursing education system at a required standards so that the quality of education and nursing services is enhanced. The findings are expected to act as an eye opener to the concerned authorities on existing situation in nursing education and practice and act on the immediately requirement for entire professional improvement. Finally, the study findings would influence policy formulation and decision making concerning improvement of performance of the student nurses in the nursing education system.

### **1.6 Summary of the Chapter and Organization of the Study**

This document is organized into five chapters. Chapter one provides background information of the nursing education system in Tanzania and study problem, statement of the problem, objectives, research questions and significance. Chapter two comprises of the explanation on the conceptual frame work of the problems and literature review of the related information on the factors influencing academic performance to students. Chapter three describes the entire process on how the study was conducted. Chapter Fours presents on study results, analysis of collected data and interpretation of the findings. Chapter Five is on Discussion and Chapter Six provides Conclusion and Recommendations of the study.



## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter reviews literature relevant to this study. It starts with the presentation of definitions of key concepts, related theoretical literature review and empirical literature review. The main purpose of the chapter is to expose the researcher into various reports, refers to what have been done by other scientists, identify the gaps and opportunity for further studies. The chapter finally presents the conceptual framework.

#### **2.2 Definition of terms**

##### **2.2.1 Performance**

The term performance refers to the scores of students in a particular subject. In academia performance refers to how well or badly a student does in his/her study as assessed through various means such as tests, assignments, field work and examinations during the entire implementation of any education curriculum. The assessment can be done on the bases of daily classroom participation and assignment, end of the topic/unit/semester and end of educational program (Broun, 2001).

Student academic performance is assessed at the end of the course program whereby results in the final nursing examination aims to judge whether students have attained the required elementary competences. If the student preparation is good she/he would

be expected to excel in performance and would be able to apply the learned concept in her/his future aspiration and practice.

### **2.2.2 Nursing Education**

Nursing education refers to transfers of professional skills, knowledge and attitudes from one generation to another in development of the nursing professions (Mosby, 2009). Basic nursing education is a formally recognized program of study that provides a broad and sound foundation for the practice of nursing, and for post basic education, which develops specific competencies. At the first level, the educational program prepares the nurse, through study of behavior, life, and nursing sciences and clinical experience, for effective practice and direction of nursing care and for the leadership role (Mosby, 2009). Thus an individual is provided with required professional competencies at a specified period of time.

In this study, nursing education is considered as the target for the outcome of qualified professionals who are tested using various laid down mechanism in a continuous and summative process. Passing of the examination is an outcome of a well portrayed education system to the individual.

### **2.2.3 Final Examination**

Final nursing examination refers to a test or assessment given to students at the end of each course of study or training. In nursing program the examination is carried out at the end of each semester or module. In this study “Final Examination” is considered as the performance assessment done at the end of the course given to

attest whether student nurses have attained the required professional competences, usually measuring all core aspects in the curriculum.

#### **2.2.4 Nursing**

Nursing is defined as the unique function of the nurse to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided (independently) if he had the necessary strength (Tomey and Alligood, 1998). The ability of an individual to function as professional within the health care sector focused on care of individuals, families and community. Has independent responsibilities to ensure individual health safety, therefore has to prevent, promote and rehabilitate at optimal care. International Code for Nurses (2013) defines nursing as the status to encompass autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and taking care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing role. Thus in this study a nurse who is being examined is assessed whether she/he has attained all necessary competencies in performing the mentioned functions for the sake of patient and community health safety.

### **2.3 Theoretical Literature Review**

#### **2.3.1 Learning Theory**

Bandura (2012) established from social learning theory in 1977 stated that learning

theories provide focus on learning activities in education program, it explain the characteristics that a learner has, and how to direct the individual into relevant course of action and achievement. It is developed through a process by which there is shared control between behavior, the environment, and the internal events that is specifically influence learner's perceptions.

It is significantly based on teacher's ability in preparation of learning materials, environment and modalities. Learning theories is grouped into categories that stimulates scholars in learning field, which include: behaviorist learning focusing on permanent change in observable behaviors due to experience. This learning helps to strengthening relationship between stimulus and response.

Second, cognitive learning, which focuses on permanent change in mental representations or associations due to experience. Its assumptions are based on cognitive, constructivist, social situation, motivational, humanists, design and models theories (Ingersoll, 1999).

Therefore, academic systems are prepared by series of standards that enable individuals to attain all competencies in a prescribed modules or tasks as mentioned by theorists. For example, social economic environment in any academic grounds motivates learners to self-regulatory behaviors of learning towards the required competencies in required performance standards. Well prepared curriculum, designed materials, reference books, social conduciveness for living and learning, stimulate imaginations directly and indirectly influence intelligence acquisitions.

Moreover, the use of various learning materials in conducive rooms with associated guidelines are considered to influence cognitive – psychomotor of the student's performances, thus the clinical areas is the necessary platform for practical learning. The relationship shows multiple functioning that affects learners performance, the process begun right from the time when the student is exposed in the learning institutions gradually gained knowledge and experiences from simplest to complex throughout the education period. In this aspect students are introduced and exposed to skills, concepts, theories and various procedures before the student gets into clinical practice. The process aimed to familiarize student nurses with different utilized learning materials, equipment, supplies, and applied skills as well as knowledge similar to these in the clinical areas (Lazar, 2010).

Skills laboratory need to have all requirement and conducive environment that are suitable for teaching and learning, all could simulate learning in a reflective manner. Also materials such as mannequins are used to demonstrate various types of nursing procedures thus enabling students to incorporate and transmit knowledge into practical's and acquire skills to an independent level of functioning. Therefore, a student who has completed a nursing curriculum is expected to score the stipulated marks in all subjects as it reflects there is a proper application of principles in implementation of curriculum in all processes (input, throughput and output). Presence of skilled and experienced nurse teachers would also facilitate proper implementation of educational activities including evaluation of the curriculum through means of set standards. Learning theory has been analyzed and observed to have good impact in learning as it easily handles inconsistencies in behavior,

optimistic in a good way, explain accurately on how behavior is learned and easy to understand with associative conditions, also it allow integration of other theories such as social and cognitive and covers a large number of behaviors. However, the theory does not take into account of physical and mental changes; it is too heavy in emphasizing on what happens as it doesn't explain all behaviors happen and its differences. In addition, the theory doesn't take into account what one person views as punishment that another may perceive as reward ( Bandura, 2012).

In nursing education, learning theory is applied or referred since its application and assumption focus on manipulating students' performance in education system because its relationship is synchronized and arranged based on the principles of Bloom's Taxonomy to meet learners' level of required performance. Therefore, based on this theory curriculum designing and implementation functional stimulates students' nurses to acquire competencies in all aspects such as attitude, skills and knowledge.

### **2.3.2 Orem's Theory of Self Care Deficit**

Dorothea Orem's Self-Care Deficit Nursing Theory is a founder of nursing education framework where the theory has been used for curricula framework for years. Orem identified the nursing practice sciences and the foundational nursing sciences with specified appropriate content for the two sciences. Through this theoretical framework the nursing curriculum was developed (Orem's, 2010). The theory refers to a series of actions a nurse undertakes to aid in meeting a person's self-care needs since it describes nursing responsibilities, roles and functions in accomplishing

patient needs whereby a man viewed as an integrated whole composed of an internal physical, psychological, and social nature with varying degrees of self-care ability. He/she has the potential for learning and development as gifted with rational ability and capacity to reflect on experience and use symbols (ideas and words). Under normal conditions, man is self-reliant, responsible and capable of continuous self-care, not only of himself/herself, but also of his/her dependents.

Specifically in nursing education the theory has been useful in developing and guiding practice, research and education materials. A number of reports and literature evidences use this theory as a basis for the curriculum of all levels (Broun, 2001). Precisely, most of the skills, techniques and methods that an individual must learner went to become a nurse practitioner are prepared based on this theory. Orem's theory is very powerful since it functions in the different fields of nursing and provides a comprehensive base in nursing practice mainly in clinical setting, education, research or administration. Moreover, this theory is as applicable in nursing by the beginning practitioner as much as the advanced clinician as it is being applied in all principles of nursing practice. Another major strength of Orem's theory is the advocacy for the use of the Nursing Process. She also mentioned that the nursing process involves intellectual and practical phases (Taylor, 2002). Thus in nursing education application of nursing process fall under this theory.

The major assumption of this theory in education aspects state that "Human beings require continuous deliberate inputs to themselves and their environments to remain alive and functions in accord with natural human endowments". Therefore in nursing

education students in learning process require some inputs from the teachers on how to manipulate patient life. Second assumption states that, “human agency is exercised in discovering, developing, and transmitting to others ways and means to identify needs for and make inputs to self and others”. Therefore, nursing education help the individual learner to discover, develop care and manage patients according to presented needs.

The ambiguity of applying this theory in nursing practice may lie in the fact that one theory does not always specifically support all aspects of nursing care since it may not encompass all aspects of care and needs of a specific client and its relationship to family, society and public education. Another constraint is the given definition of health as being dynamic and ever changing with states ranging from health or non health, wellness or illness also focuses more on physical care and gives lesser emphasis to psychological (WHO, 2005). Therefore, this theory addresses as quite adequately in caring.

In nursing education practice situations, the curriculum has all conditions that makes learners and teachers to focus on the standardized competences desired to a particular level of nurses and midwives education. Therefore, formalized methods or techniques of practice, clearly described ways of performing specific actions so that some particular result will be achieved, the techniques must be learned and experienced. This knowledge is the concrete base for nurses’ development of creative practical insights of what can be done to bring about beneficial relationships or conditions that do not presently exist. The organizational framework model of



curriculum development and implementation of the Competence Based Education (CBET) curriculum for nurses shows arrangement of learning contents in sequential manner, showing areas of competency needed for a learner.

It is further scripted in enabling outcome and related tasks for each specific objective of which enable teachers to prepare related learning and teaching activities. The curriculum has all conditions that makes learners and teachers to focus on the standardized competences desired to a particular level of nurses and midwives education. Uses of test, examination, field assignment are most important factors that may help to distinguish student's performance in the classroom.

This means that students who have difficulty in coping and managing the study material for tests that have a lower performance grade "D" irrespective of other factors (Surgit, 2010). In nursing curriculum assessment mechanism is on continuous measured through test, classroom assignment, individual assignment, field work, unit tests and end of semester examination while the final assessment is through final nursing examination that measures all areas of competencies in a semester or course. Student is supposed to secure 50% pass mark.

### **2.3.3 Herzberg's two Theories-Hygienic and Motivational Factors**

Hygienic factors are those job factors which are essential for existence of motivation at workplace (Herzberg, 1983). It entails positive stimulation and maintains existence of personnel at workplace adequate and reasonable number supplied to facilitate job performance. Negative or less performance is the result of dissatisfaction. The theory

insists on availability of safe working environment as predominant stimulus in human behavior. Inadequacy of instructional materials, equipment and laboratory facilities in the schools also affect negatively the effective learning of nursing skills in the schools. Establishment criteria consider infrastructures' adequacy as the main requirement in conducting nursing education as it serves as the main support in all education aspect such as spacious room for classroom, skilled laboratory, dormitories, library, and others in connection helps to facilitate learning and teaching environment.

Researchers realized that factors contributing to poor academic performance includes; inadequate learning resources and monitoring by head teachers who are close supervisors, understaffing, high teacher turnover rate, inadequate preparation, lack of motivation for teachers, large workload, and lack of support from the supportive teaching staffs (Owalabi, 2012).

In nursing education, infrastructure like water, electricity, toilets, dormitories, transport to clinical areas, dining room could not affect students learning and performance, because they seem to have indirect relationship with education academic progress. Where with global changes and privatization of these services are outsourced. Unconducive environment may also associate with the lack or improper disposal of learning contents causing dissatisfaction, lack of necessary materials and requirement that influence learning. Hygienic can be assumed to be an association between satisfaction and productivity therefore need for favorable working environment that would arouse individual commitment and satisfaction.

## **2.4 Empirical Literature Review**

Worldwide, nursing assessment or test is being carried to evaluate individual capacity in relation to expected competencies to be discharged in the working areas. It provides room for proper securitization of the qualified personnel for human resources placement. Broun (2001) defines nursing examination as the way to test an individual on basic nursing level of competency as he/she acquire on process based on the of the nursing curriculum objectives ,the broad areas of nursing and other related disciplines and competencies. It also uses prescription of a set of tests given to student to assess the suitability for employment as nurses or midwives.

Nightingale in 1860 established first nursing service at St. Thomas Hospital in London where she laid down students assessments as the foundation of professional nursing. It afterward took the lead in applying Nightingale's model in all nursing training programmes, standards of classroom and on the job training (Nightingale, 2005). The practices lead along with the expectation of daily nursing professional training conduct.

Edina (2011) states that a student fails or gets less marks in examination because does not know all the factors or does not pay attention to all the factors which make a student get high grades in examination. Student's mental approach towards study, attendance in lectures, method of preparing for examination answering questions tactics and strategies, making good and helpful notes, direction of study, method of learning, memorizing, concentration, confidence and study related extra-curricular activities are the factors which make him succeed in examination. A brilliant student

pays attention to all the factors which make him pass or succeed in examinations. On the other hand, if the student fails or gets less marks in examination, is regarded as weak in one or more of the above factors. Sometimes a student studies a lot but gets fewer score in examination because may not be aware of test taking strategies which tells him or her on how to express his learning in best way in examination or reproduce his learning in a good way in examination to convince the checker or tutor to give you more marks.

In addition, factors such as areas for practice, availability of teaching materials, teachers' modalities and assessment criteria's are among the motivating factors that impose the way that learning activities being set and the area of competencies needed. According to the research findings on motivational factors to students who model and substitute nursing roles and get insight into their future profession, it shows that nurses as role models have the most influence on the motivation or no motivation of students during the clinical education (Bloch, 1959). Also a well motivated students are inclined to adopt a deep and/or strategic approach to studying most of the time. Students will thus be encouraged to learn with understanding and insight on the given assignment (Yolande, 2011)

In Africa, Kenya's education system is dominated by examination-oriented teaching, whereby passing examinations is the only benchmark for performance because there is no internal system of monitoring learning achievements at other levels within the education cycle (Maiyo, 2009). It is generally agreed that the most important manifestations of quality education have to do with literacy, cognitive abilities,

performance and progression to higher levels of learning. There is reliance on scores and transition rates as core measures of achievement. In Kenya, examinations generally acceptable as valid measures of achievement (Maiyo, 2009). Factors such as academic competence, test competence, time management, strategic studying, and test anxiety, are studied to identify whether these factors could distinguish differences among students, based on academic performance and enrollment in the experiential program whereby there was a significance associated with factors such as academic competence and test competence. It was observed that the adequacy and use of teaching and learning materials affect the effectiveness of a teacher's lesson. Teaching and learning resources enhance understanding of abstract ideas and improves performance. The study sought adequacy of learning resources like text books, library books, wall maps and exercise books.

Additionally, anxiety explained as an emotional and behavioral disorder caused by the activation of sympathetic nervous system. In the domain of education, high level of anxiety is often experienced by students during performance related activities such as, examinations. In fact, academic examinations and school work are considered to be the most stressful events of adolescent's life. Inefficient study, night study before examinations, lack of review/revision of study materials, emotional, and negative/irrational thinking about examinations are some of the causes of examinations anxiety. Although some level of anxiety among students is essential to achieve success in examinations, too much of it can have adverse effect on their performances. Importantly, students with high level of anxiety could have an impact

on working memory, reasoning abilities, self-esteem, academic performance and achievement (Maiyo, 2009).

In Uganda education background and admission points are viewed as factors among others that influences poor academic performance in the future life of students in learning arena. This significantly revealed that there exists relationship between students' secondary and primary levels of education with schools' locations, teaching personnel and facilities, contents, and financial influences. However, the entry criteria of students in nursing programs relate much to the objectives of the program and the pass points of the individuals (Kyoshaba, 2009).

In Tanzania, assessment in the final year of student nurses is carried out through examinations. The practice started in 1953 subsequent to the enactment of the Nurses and Midwives Registration Ordinance in 1952. Assessment mechanism and continuous measurement are made through test, classroom assignment, individual assignment, field work, and unit tests and end of semester examination while the final assessment is through final nursing examination measures all areas of competencies in a semester or course. A student is supposed to secure pass mark of D grade which is (50%) and above as obtained from cumulative results of continuous assessments and final nursing assessment (MoHSW, 2009). However, the Nursing Profession Regulatory Authority has set various standards of proficiency which provide principles of practice for nurses and midwives, the context, guidance and the scope of professional practice for each part of registration. Graduate nurses and midwives during the entire learning process including the level of achievement

have to be assessed through the set out standards. In order to provide sound and balanced training system that enables students to focus on gaining the required competences and realizing the skills sought by employers of nurses and society, the assessment philosophy of the programme has to be based on continuous and summative model to reflect progression of the studied modules.

The main assessment objective is to set a comprehensive system of measuring achievements of the learning outcomes. It provides a yardstick for which the expected outcomes and benchmarking items are evaluated. This aspect has two major components, one for measuring performance and achievement while the other is for evaluating the achievement of the goal as well as ascertaining whether the teaching and learning processes are efficiently and adequately attained. Therefore, it has to reflect the aims and objectives of the overall programme, designed to assist student learning and whether they have fulfilled learning objectives (MoHSW, 2009). Supervision as techniques or means of enhancing classroom work through direct visitation and observation regarded as the process enhance professional growth of the teachers and students as it sharpen classroom teaching through democratic interaction between the student, teacher and supervisor. For instance, clinical supervision normally consists of groups of teachers, supervisors, including subject specialists supervisors who work together to achieve set out goals. It is based on mutual trust and harmonious interaction between teachers and supervisors.

Introduction of competence based curriculum in education promote an individualized teaching learning process, and identify learning outcomes in terms of what a person

must know and be able to do. It is argued that the competency based approach promotes quality and safety of performance as it deals with what individuals can do. The level of performance and the expected result are contrary to the expectations. Differentiation of the output based on the competence curriculum shows great changes and challenges in various health care delivery centers in Tanzania. The situation alarms stakeholders and trigger them to intervene the situation through improving teaching materials such as demonstration equipment and supplies for both clinical and classroom learning (TNMC, 2012).

## **2.5 Factors Influencing Nursing Academic performance**

### **2.5.1 Adequacy of Learning Resources**

Implementation of curriculum requires preparation of adequate teaching and learning resources that would enhances understanding of abstract ideas and improve performance. Materials such as adequate and relevant text books, Nursing Journals, Newsletters, Periodicals, Guidelines, textbooks, handbooks, newspapers/magazines and manuals. Policies in the library, documented materials in CD ROMs, Computer with Internet all influence knowledge acquisition.

However, the presence of skills teaching and learning materials that are well arranged meet area of experiences, available guidelines, checklists and pocket books also arouse individual learning and performance. Skills laboratory is an important area of learning in a nursing school. It is strongly urged that every nursing training institution should ensure that standard rooms are set aside for practical learning. Schools should also include application of different modalities in the skills laboratory



to enable student nurses to acquire basic competences under the skilled and experienced instructors or nurse tutors' guidance. Adequate time should be availed for the student nurses to frequently conduct all necessary practical skills and principles through use of prepared checklists, procedure manual, case study, manikins', computer and video sets. Thus, MoHSW in collaboration with various stakeholders should ensure that skills laboratory are in place and are maintained.

It is well known that, during the entire course, students are expected to acquire knowledge, incorporate critical thinking and psychomotor skills, develop self-confidence in their abilities, and then transfer this knowledge to the clinical setting, stimulate learners motivation, satisfaction, improve patient safety, communication skills teaching methodology and inter-professional learning (Maruff, 2011). However, measurement of effective skills laboratory learning is through clinical competencies of student performances in their ability to integrate cognitive, affective and psychomotor skills in deliveries of care. Having conducive clinical setting and adequate support from qualified nursing faculties will influence students to utilize various materials in developing skills, knowledge, information, communication and interpersonal relationship in problem solving and technical skills.

Supervision as techniques or means of enhancing classroom work through direct visitation and observation is regarded as the process of enhancing professional growth of the teachers, the curriculum and improving the teaching of teaching in the classroom through democratic interaction between the teacher and the supervisor. For instance, clinical supervision normally consists of groups of teachers

and supervisors, including subject specialists supervisors working together to achieve set out goals. It is based on mutual trust and harmonious interaction between teachers and supervisors. The goal of clinical supervision is to enhance the individual classroom teacher's performance. This is normally taking place in the classroom through observation. Okendu (2001) reported that poor performance of students has been attributed to many ailing problems in the secondary level of education. The observed problem ranges from lack of required basic infrastructures to classroom instructional services, support services and instructional supervisions.

### **2.5.2 Qualified Nurse Educator**

In America the problem of unqualified teaching teachers pushed to low standards of education,,it hamper the process of curriculum implementation although one can ensure that the classroom has staffed. These person are largely lack of knowledge and skills on in-depth ability and motivational mechanism to manipulate environment into learning application. Commented that higher qualified teachers in education institution are these with college degree teaching registration background and preparation in particular experiences (Ingersoll, 1999).

Naeemi (2013) stated that teachers can make individual grow through proper teaching, assessment and nurturing both theoretically and practically. Therefore necessity of skilled teacher is the one could affect the success or failure of any educational program following his/her dedication, professional values, competences derived from outstanding academic skill acquired and one's background to combine clinical expertise and a passion for teaching into rich and rewarding careers.

However, in nursing a carrier professional who work in the classroom and the practical setting, are responsible for preparing and mentoring current and future generations of nurses. Nurse educators should be trained personnel to play a pivotal role in strengthening the nursing workforce, serving as role models and providing the leadership needed to implement evidence-based practice. Nurse educator's responsibility includes designing, implementing, evaluating and revising academic and continuing education programs for nurses. These are formal academic programs that lead to an award of professional certificates through licensing and registration process, or more informal continuing education programs designed to meet individual learning needs (Sabah at, 2012).

Moreover, Nurse educators also help students and practicing nurses to identify their learning needs, strengths and limitations, and they select learning opportunities that will build on strengths and overcome limitations. This makes the graduate nurses to posse's qualifications with excellent communication skills, creativeness, as well as possessing, a solid clinical background, subject matter competencies and flexibilities. This is made possible on well designed and competences of teaching staff that are ready in organizing the learning process. Educators' must further shows qualifications with excellent communication skills, creative, have a solid clinical background, subject matter competencies, be flexible and possess excellent critical thinking skills. They also need to have a substantive knowledge base in their area(s) of instruction and have the skills to convey that knowledge in a variety of ways to those who are less expert. Furthermore, research proves that teachers who have professional qualification perform better than those who do not have professional

qualification. Therefore, it is important to have professional qualification for teaching professional skills. Teachers who follow the professional standard of teaching lead their students towards success (Sabahat, 2012).

Teachers' should be experts in their subject contents and should aim at facilitating more with higher student interaction. Lecturers should thus use instructive approaches that are learner centered and current, by introducing relevant information technology (IT) into the learning experience (Yolande, 2011). Also the standard classroom student ratio is 1:10 for diploma nurse, 1:15 for certificate. Clinical teaching and supervision (mentor's students ratio is 1:7). Therefore a class should have 4-5 teachers while in the clinical centre each ward/unit should have 1-2 mentors for effective teaching and learning in nursing schools (TNMC, 2010).

### **2.5.3 Availability of Instructional Materials**

One of the important requirements in nursing school establishment is the availability of instructional materials both in classroom, skill laboratory and in clinical areas. However the quality of teaching staff for proper utilization of materials in the teaching and learning process might be doubtful in our context. Skills laboratory regarded as an essential part of curriculum, students are introduced to skills, concepts, theories, procedures that can take them into clinical settings. The process start right from the time when the student is exposed and begin to attach to the schools. Thus skills laboratory need to have all requirements set into a conducive and suitable for learning environment with standard equipment to stimulate individual learning. Materials /equipment such as mannequins are used to practice the different

types of procedure in nursing to transferee's knowledge into skills (Paul 2011). Therefore, availability of skills laboratory and their resources is very important in nursing aspects learning and teaching. As it brings an individual thinking into action (reflective learning).

Karen at all (2007), insisted on importance of reflection and reflective practice capacity as an essential element in professional competencies, noted that proper utilization on availability and specified materials both in classroom, skills laboratory and in clinical settings emerge the reflective practice as part of changes of knowledge that need for students to act and think professionally as an intergral part of learning through their course of study. This means proper impaction of knowledge, information and values its easily interpreted and changed into skills through manipulations hence problem solving approaches in arena of cognitive, emotional and psychomotor behavior.

Availability of instructional materials serves as an aid for instruction. Its inadequacy would make teachers not able to make their strategies in teaching in an effective and meaningful manner, as well as making students to learn and understand their lesson and acquire the skills necessary in the field. Having adequacies number of instructional materials in nursing school will support the student's effective learning and influence its own demand in the educational system. More support on this findings reported by Bullough (1987), who said that a teacher's job does not end in managing the classroom, planning and evaluating but major expert must be on instructional materials which has a big impact in teaching and learning process as it

influence student's enthusiasm, involvement and willingness to learning process. Instructional materials serve as a vehicle for improving the quality of learning for every student. It depicts the reality of idea and typical answer of different questions

However, for the classroom teaching, instructional materials are in various classes, such as audio or aural, visual or audio-visual. Thus, audio instructional materials refer to those devices that make use of the sense of hearing only, like radio, audio tape recording, and television. Visual instructional materials on the other hand, are those devices that appeal to the sense of sight only such as the chalkboard, chart, slide, and filmstrip, drawings, photographs, pictures and maps. An audio-visual instructional material includes television, captions picture and the computer courseware and its connectivity software. However, they simulate the sense of both hearing and seeing (Mafurff, 2011).

For nursing school library is a useful learning resource that enables students and teachers to prepare for leaning, teaching and research in accordance with the basic functions of the institution.

A well prepared school library contain all relevant learning reference materials in the library room including journals, articles, news, books, publications and related materials. Soft ware materials are also easily retried at library computers. In Nigeria for an institution to be approved as a school of nursing, it must have a library with the seating capacity of at least fifty (50) Book shelves, Magazines/journals stands, At least 500 relevant nursing textbooks, At least 100 research papers, journals or

abstract, At least 100 reference books in nursing and professional librarians (Nigeria Nursing Council, 2014).

Mafurff (2011) stated that a teacher may use a combination of these materials for suitable lesson deliveries whenever appropriate, suitable, relevant and objectively selected. Evidences revealed by a study conducted among secondary school students in Nigeria concluded that material resources have a significant effect on student's achievement in each of the subjects. It has been proved to provide adventure, creativity, curiosity and perseverance on the part of teachers, while for students it stimulates learning, intelligence and acquisitions. In Tanzania establishment of nursing school insisted on availability of necessary resources that would be easily utilized in implementation of curriculum. Teaching materials for classroom, clinical and skills laboratory is being well indicated were as the inspection of the school before legal permit adherer on its attainment. (TNMC, 2010).

## **2.6 Research Gap**

The chapter presents information obtained from different literatures on factors influencing low academic performance for certificate and diploma nursing in the final nursing examination. Most of the literature focused on general education and not on nursing. Alabama, (2006) reported on the relationship between classroom overcrowding and poor pupil's performance, lack of teaching and learning materials in primary education setting as among the factors associated with poor academic performance.

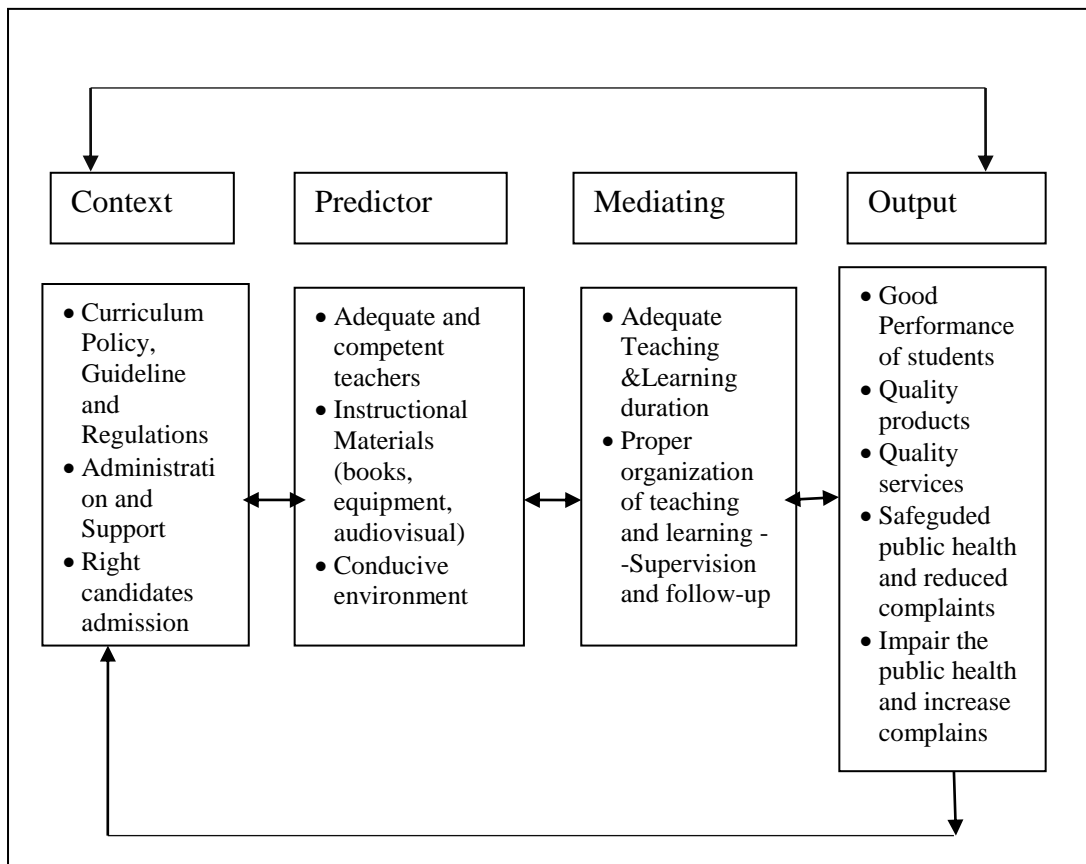
Omari, (2011) stated quality of a good teacher include ability to perform his/her responsibilities with great commitment as a pre-requisites for successful and excellent education. Apparently, there is a limited information regarding nursing education practice in Tanzania mainly on issues related to status of curriculum, capacity of training institutions in terms of teaching staff, learning and teaching materials/and prepared examination papers.

Therefore, this study will explore more on the factors influencing low academic performance of student nurses in the final nursing examination. Obtained information will be considered as basis in improvement of nursing education practice since it will be applied in decision making on implementation of any program related to nursing education.

## **2.7 Conceptual Framework**

This section proposes a conceptual framework within which the concept, academic performance is treated in this work. The selection of the model is based on the belief that, the quality of input invariably affects quality of output in this case academic performance.





**Figure 2:1: Factors Influencing Low Academic Performance in the Final Nursing Examination a frame work. Modified from Omari (2011)**

Figure 2:1 provides a framework of relationship between multiple variables categorized as independent and dependent variables. The study drew the concept from Omari (2011). The variables are of four dimensions: 1) Context variables (independent); 2) predictor variables (independent); 3) mediating variables (independent); and 4) output variables (dependent). Based on this theoretical review there is a connection with many factors that influencing academic performance as evidenced in the final examination in education setting. It also showed the interrelationship between the three independent variables and their reflection to the dependant variables. In assessing the academic performance of student nurses and

midwives based on the assumption of the availability of the well-designed educational policy statement, curriculum, and strong administration would provide a way for placement of necessary and enough instructional materials and other resources to implement the system in a required standards in implementation of education activities. This is very important in enhancing academic performance in the final examination in education setting, when shared together it provides guidance to better outcome in academic situation. It also influences availability of all other factors that would make positive achievement of the students.

In connection to Predictors variables such as availability of adequate resources such as qualified teaching staffs both in classroom and clinical areas, updated books in the library, demonstrations materials, and relevant student's admission would also facilitate performance. These variables influence student's performance, act as important factors in facilitation and proper implementation of the curriculum, enabling it to yield the expected outcome. Together, mediating variables also contribute to success such as teaching and learning activities including methodologies and assignment, supervision and evaluations, all those influence learning attitudes leading to improvement in academic performance both in semester and in final examination as dependant variables (outputs).

The output implies to competent graduates who will be employed in the professional labour market for quality health service deliveries. The researcher would therefore like to go ahead and statistically prove the relationship between these three variables, i.e. admission policy, Education resources capacity, Learning environment, and

infrastructures and the performance status of teaching staff with reference to Tanzania Nursing education system.

## **2.8 Summary**

From the reviewed documents, a number of observations can be made on the gaps identified from the other researchers. View on the importance of well-organized learning environment and its importance is explained. Well organized curriculum framework for education program, the learning and teaching perspectives, roles of a teacher in implementing the stated curriculum are also among the necessary areas that have been examined by many researchers. However, for nursing education in particular, researchers had viewed the main factors such as lack or availability of reference books, and instructional materials, infrastructure, teaching staff, and inappropriate skills laboratory utilization. Lack of modern instructional materials and the know-how of implementation of CBET curriculum may also positively or negatively influence academic performance of students in any learning setting. From this evidence, this researcher has found it necessity to conduct a study to find out the existing nursing education situation in the Eastern zone of Tanzania on whether there has been an adherence to the mentioned factors and how this has enhanced the implementation of curricula and their relationship to students' academic performance.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter provides detailed description on methods that were applied in the process of data collection, analysis and presentation. It includes explanation of the study area, study population, study design, sample size, sampling techniques, and data collection tools as well as data analysis techniques.

#### **3.2 The Study Area**

The study was conducted in the Eastern Zone, which encompasses nursing schools located in Dar es Salaam, Coastal and Morogoro regions. In this zone there are 11 nursing schools, comprised of 7 diploma level and 4 certificate level schools. Among them, 4 schools are government, 4 are Faith Based Organizations (FBOs) and 3 are private owned. Selection of the Eastern Zone was based on the fact that the area could be easily accessed by a researcher as the schools were located close to tarmac roads and whereby feeder roads connected easily to the Dar es Salaam city.

Furthermore, documentation indicating if there is any study previously conducted in this particular area related to factors influencing low academic performance in the final nursing examinations to student nurses not revealed. Finally, the Eastern Zone nursing schools had presumed number of students and teaching staff who apparently presented with the same characteristics of the expected respondent in this study therefore would signify necessary information about the stated problem. The findings

would represent and generalize the entire population in nursing training and would be applied in improving the quality of nursing education in Tanzania.

### **3.3 Research Design**

Research design gives overall plan of research which spells out the strategy showing the way on how data was collected from respondents (Kothari, 2004). The study was a descriptive one as it would describe the situation; find the facts and present factors that influence student performance in nursing education system.

### **3.4 Research Approach**

Both quantitative and qualitative approaches were employed as it would lead the researcher to understand and derive descriptive data on the factors influencing lower performance of student nurses in the final nursing examination. The qualitative approach generated a rich understanding of a phenomenon as it exists in a real world. It involved collection of data in the actual situation or area of study. It thought to be appropriate in this study as it allow the research to get the intended information basing on the objectives of the study on how the nursing education and training is being implemented in Tanzania and their experiences and feelings in relation the conduct and the outcome mainly in the final examination . Also it involved blending together of different data collection strategies as the researcher can make a descriptions of the data collected from the field. For this particular study Different methods of data collection were used to obtain information from various perspectives such as interview, observation and documentary (Creswell, 1994). While quantitative information generated through use of questionnaires.

### **3.5 Target Population**

Targeted population refers to a group of people, individuals, objects or items in which the researcher was intending to gather information related to the stated problem. In this study the population included all teaching staff in nursing schools, student nurses in both certificate and diploma levels, Principals and officials from the Ministry of Health and Social Welfare, Nursing Training Section, President of Nurses Association and Regulatory Board Chairperson.

### **3.6 Sampling Procedure and Sample size**

#### **3.6.1 Sampling Procedure**

Sampling is explained as a process or techniques of selecting a suitable sample or representative part of the population for the purpose of determining the parameter or characteristics of the whole population (Kombo and Tromp, 2006). In this study both probability and non-probability sampling procedure were applied.

#### **3.6.2 Sampling Strategy**

##### **3.6.2.1 Simple Random Sampling**

Simple random sampling was used to avoid bias and to ensure that each individual from the population has an equal chance of being involved in this study as a member of the sample among numbers of students and teaching staff who would provide information. Research utilized a prepared table to randomly picking respondents from the total number of students in second year certificate program and in third year diploma program.

### 3.6.2.2 Purposive Sampling

Purposive sampling was used to select sample of interest to form part of the sample. In this study, purpose sampling was used to pick schools, officials, principals and teaching staff as participants in this study. Respondents were visited in their respective areas/offices since their data were much expected to supplement and enrich information collected by questionnaires from students and teaching staff. Thus, 8 nursing schools, 16 teaching staffs, 8 Principals and 4 officials from nursing section – MOHSW, Regulatory Authority, Professional Association and from Chief Nursing Officer office in Eastern zone were involved.

**Table 3.1 Category and Number of Respondents Selected for Study Form**

SN	School Name	No. of Students	Selected Sample %	No of Teaching staffstaff	Selected Sample %	No. of Principal	Selected Sample %	Official	Selected Sample %
1	A 3 Institute (C)	116	10	10	2	1	1	0	0
2	Mikocheni (C&D)	78	20	10	2	1	1	0	0
3	Massana (C&D)	148	20	5	2	1	1	0	0
4	Lugalo (D)	91	10	10	2	1	1	0	0
5	IMTU(D)	38	10	6	2	1	1	0	0
6	Muhimbili (D)	240	10	16	2	1	1	0	0
7	Berega (C&D)	63	20	8	2	1	1	0	0
8	Morogoro PHN(c)	78	10	4	2	1	1	0	0
9	TNMC	0	0	0	0	0	0	6	1
10	TANNA	0	0	0	0	0	0	4	1
11	NTS	0	0	0	0	0	0	5	1
12	CNO	0	0	0	0	0	0	5	1
	<b>TOTAL</b>	<b>852</b>	<b>110</b>	<b>69</b>	<b>16</b>	<b>8</b>	<b>8</b>	<b>20</b>	<b>6</b>

Source: Field Data Survey, 2015

**Key:** C- Certificate Program: D-Diploma Program, C&D- Certificate and Diploma Program

### **3.6.3 Sample Size**

A sample has been defined as a group of respondents as a subset of population in which data or information is collected. It helps to allow the researcher to obtain data from the population and conclude the results to represent the whole population (Kothari, 2004). A total of 138 respondents were intended as sample size for this study, out of which 110 were students, 16 teaching staff, 8 principals and 4 officials in nursing section.

## **3.7 Sources of Data**

### **3.7.1 Primary Data**

Primary data in this study refer to the first-hand information collected in the field to answer the study objectives and research questions. The primary data were collected from respondents who are student nurses, teaching staff, college principals, and officials, using questionnaires, interviews and direct observations. The primary data were expected to give practical answers to the research questions. The data enabled the researcher to evaluate the practice of nursing education both in public, faith based organizations and private nursing schools in the Eastern Zone.

### **3.7.2 Secondary Data**

The secondary data were documented information collected from various sources such as libraries and from different reports, newspapers, files, books, journals, and reports on student performance in a continuous assessments, end of semesters and in final examination results which are available at schools, MOHSW and TNMC office. In regard to more information, internet was used to obtain information from relevant



documents such as manual, letters, articles and journal, and websites. The researcher had vividly read the records on student's performance, education activities schedules and rotations, number of available teaching materials in each specific visited school to view about performance of student nurses in the final nursing examination.

### **3.8 Data Collection Methods**

Both qualitative and quantitative data techniques such as interviews, direct field observation and document reviews were applied. Primary data were obtained through the use of checklist, interview guide and questionnaire. The secondary data were obtained through review and witness availability of reports and publications contents. These different methods were selected in order to increase reliability of the collected data and credibility of the findings as it minimizes the possibilities of making erroneous conclusion.

#### **3.8.1 Qualitative Data Collection Techniques and Instruments**

##### **3.8.1.1 Interview**

Semi-structured face- to- face conversation was employed whereby an English version prepared set of interview guide was used to collect data from 12 key informants (Principals and officials). The researcher, with the help of three research assistants, formed two pairs of investigators that conducted interviews at the respective areas. An audio recorder was used to capture conversations. While one researcher was interviewing and recording, another one had to take notes. The interviews took 15 - 20 minutes. Field notes were collected to complement the data (Appendix 5).

### **3.8.1.2 Documentary Review**

Document review is explained as a method of data collection which involves deriving of information by studying written document (Best and Kahn, 1993). In this study, prepared checklist was used to review the existing documents and records in relation to student/teachers' performance activities in education system in the nursing schools (Appendix 6). This was expected to secure direct information on student continuous assessment, semester and final examination, number of teaching staff, records and reports concerning students' academic assessment, classroom attendances, various academic schedules for students learning activities and teaching rotations both in classroom and clinical areas.

### **3.8.1.3 Direct Observation**

This is the data collection method through which information is collected through physical examination of the object (Kothari, 2004). In this study, the researcher went into schools and observed actual performed learning and teaching activities versus the practice with specific reference to nursing education, schools environment and presence of skills laboratory, existing instructional materials, library, dormitories, number of human resources, classrooms, general surroundings and number of students in relation to their academic performance. Observation checklist was used during investigation of the targeted areas in accordance with research objectives (Appendix 6).

The researcher had to tick on availability or non-availability of the observed areas embraced with key comments. This method was useful in checking and controlling

the validity and reliability of the study since the data were directly obtained from the field and expected to eliminate bias throughout the process.

### **3.8.2 Quantitative Data Collection Techniques and Instruments**

#### **3.8.2.1 Questionnaires**

In this study questionnaire with open and closed ended questionnaires were administered to respondents to collect their views on performance of student nurses in the final examinations. Questionnaires were used because through them a lot of information's were expected to be collected within a short period of time with minimal resources. However, the researcher with the help of assistants physically administered questionnaires to the respondents mainly, academic staff members who are nurse tutors and students. A total of 110 nursing students and 16 accountable as classroom and teaching staff were captured in this study (Appendix 3 and 4).

### **3.9 Data analysis, Interpretation and Presentation**

Collected data were organized based on the research objectives and questions to facilitate its appropriate way of analysis. The process started at the study onset by scrutinizing all questionnaires to look on possibility of error, omissions and fallacy.

#### **3.9.1 Qualitative Data Analysis**

Data collected through interview was analyzed using content review approach by listen all verbal and written scripts after fieldwork to get a sense of what the respondents communicated in relation to the presented subject. Subsequently, information was sorted out into appropriate unit and analyzed in narrative themes to

reflect the prominent information basing on the study objectives and research questions. Data was interpreted, discussed and presented in a descriptive way reflecting on each specific research objective. Various tables and figures have been used to present the findings.

### **3.9.2 Quantitative Data Analysis**

Statistically data from questionnaires were analyzed, cross-checked to detect errors and omissions, coded according to number of variables and their responses and finally tabulated into complete dataset. Categorization of data was formed and organized so that they could easily be processed using the computer packages software known as Statistical Package for Social Sciences (SPSS) version 20. SPSS was expected to generate accurate data inform of frequency distribution, percentages as well descriptive of the tests as applied to determine the study significance.

### **3.10 Validity and Reliability**

Validity refers to the extent to which data collection method or methods accurately measures what they were intended to measure or the extent to which research findings are really about what they profess to be about. Reliability refers the extent to which data collection technique or techniques will yield consistent findings (Cress well, 1994). Prior to data collection, the study tools were tested to assure internal validity. In this study instruments were pre-tested and re-tested to a small number of nursing students before commencing the actual data collection process. Thus 10 students and two teaching staff were test-interviewed and minor corrections were noted. These were addressed accordingly to ensure clarity, adequacy and

comprehensiveness of the tools. Validity of data was tested through triangulation of methods during sampling and proper, selection of data collection instruments and techniques. In addition, the process was expected to be an endeavor by counter-checking and identification and correction of the items which were not suitable for the study to make the study more consistent.

### **3.11 Summary**

The chapter described the study area and various research methods employed in this research for collecting the required information. Different type's approaches, strategies and techniques were selected for this research based on relevance and advantages. The techniques were interviews, observations, document reviews while questionnaires, interview guide and checklist were used as tools for accurate data collection. Finally, the Chapter explains on how data were analyzed.

## CHAPTER FOUR

### 4.0 PRESENTATION OF THE FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter presents information collected in the field and discussion of the research findings on the factor influencing academic performance of nurses' students in Eastern Zone. The first part of this report presents characteristics of the respondents followed by the factors influencing low academic performance in nursing examination. Third section examines education performance of nurses' students and measures to deal with the problem. The last part presents the discussion of the findings.

#### 4.2 Characteristics of the Respondents

This section presents characteristics of the respondents based on gender, age, education and work experiences. Respondents of this study were second year certificate nurses and third year diploma nurses, teaching staff, principals and heads of nursing section at Ministry of Health and Social Welfare (MoHSW). In this study 138 respondents were involved. In this study 110 (78%) were students, 16 (13%) teaching staffs (academic and class teachers) and 12 (9%) were principals' and heads of nursing sections/departments (Table 4.1).

**Table 4.1 Characteristics of the Respondents**

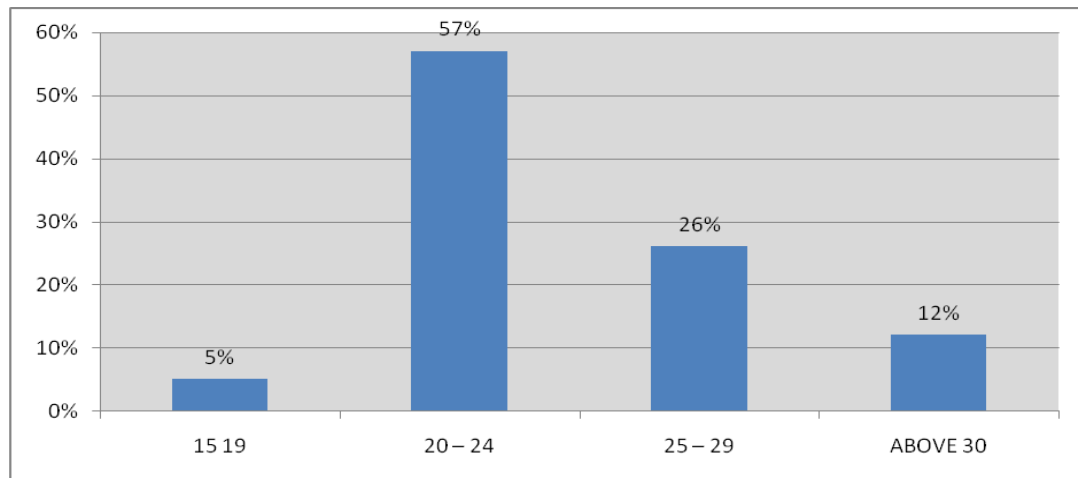
Category of Respondents	Frequency	Percentages
Students	110	78
Teaching staff	16	13
Heads of sections (Principals and Nursing section leaders)	12	9
Total	138	100

Source: Field Survey, 2015

#### 4.2.1 Age of the Respondents

The age of students varied between 15 and 33 years (Figure 4.1). In this study 57% of the respondents were of the age between 20 and 24 years, while 26% of the respondents were of the age between 25 and 29 years. However, the last age group ranges between 30 and 33 years with 12% of the respondents. About 5% of the students interviewed have age ranging between 15 and 19 years. In this study respondent with age ranges from 20-24 years were dominant group found in nursing schools followed by these with age ranging from 25-29 years. Suitable age for college student is between 20 and 25 years as the brain reaches adulthood and its significant changes in brain structure after age of 18. Therefore it is worth for learning process and good performance than older age (Baird 2005). Also for the nursing course it is important since they are prepared for patients care responsibilities.

However, the dominant age reflects on normal proceedings of individual in education process as stated by education policy and formula of  $1+6+7+4+/-2+3=21-23$  years then are responsible to shoulder professional work for 30-35 years before retirement age of 60 years (Ministry of Education 1998). It is also stipulated in the standards of proficiency for nursing education and practice in Tanzania that entering in a program for pre-service registration nursing education students shall not less than 18 years of age on the first day of the commencement of the program. As it complies with completion of secondary education, which is 17 years in our context but also favor for the minimum age for government employment policy (TNMC, 2007).



**Figure 4.1:** Age of the Nursing Students' Respondents. **Source:** Field Survey, 2015

#### 4.2.2 Teaching Staff

The study findings presents that, 38% of teaching staff were of the age between 30-40 years, 31% were of the age between 41 and 50; 6% were of the age between 51-60 and 25% were of the age between 61-70 years (Table 4.2). Majority of teaching staff were of the age between 30-50 years. This category of age is within employable age, most of them are the recent graduates from universities, capable and energetic and therefore expected to have positive impact in nursing education carrier. Those between 61 and 70 years are the retired personnel but are still working due to their experiences in teaching and guidance's. Most of them were found in private and Faith Based Organization where there is no employment age limit.

**Table 4.2:** Age of Teaching Staff

Age category	Frequency	Percentage
30-40	6	38
41-50	5	31
51-60	1	6
61- 70	4	25
Total	16	100

Source: Field Survey, 2015



### 4.2.3 Gender of the Respondents

The findings shows that, majority of respondents were females 67(49%) and 43 (31%) were males students (Table 4.3). While for teaching staff, 13(9%) were females and 3(2%) were males. Historically and culturally nursing profession were considered as the best choices for female as they were perceived to contain mothering characteristics than male, therefore could provide good care. Currently, nursing carrier is also found as the only profession with higher employment opportunity in health care sector than other sectors therefore becomes a doorway into nursing profession for majority including men.

**Table: 4.3 Gender of the Respondent**

<b>Respondents</b>	<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Students	Male	43	31
	Female	67	49
Teaching staff	Male	3	2
	Female	13	9
Principals and other officials	Male	7	5
	Female	5	4
Total		137	100

Source: Field Survey, 2015

### 4.2.3 Respondents' Working Experiences

The study finding shows that teaching staff comprised of those with short and long term experiences in nursing education and training practice. Working experience here means years someone has been in the field of nursing. Table 4.4 shows that out of 16 teaching staff, 2 (13%) had experience in teaching for the range of 2 and 5 years, whereby another 2 (13%) had less experience since they had worked for a period of less than two years. Meanwhile, 4(25%) worked in the nursing field for

duration of 6-10 years. Additionally, 5 (31%) had worked for a period of 11- 15 years. Combined 1 (6%) and 2 (13%) had vast experience due to long period of working in teaching. They have worked for more than 16 years. The findings indicated that 50% of teaching staff had experience of more than 10 years thus considered to be contributing to students' performance.

**Table: 4.4: Working Experience**

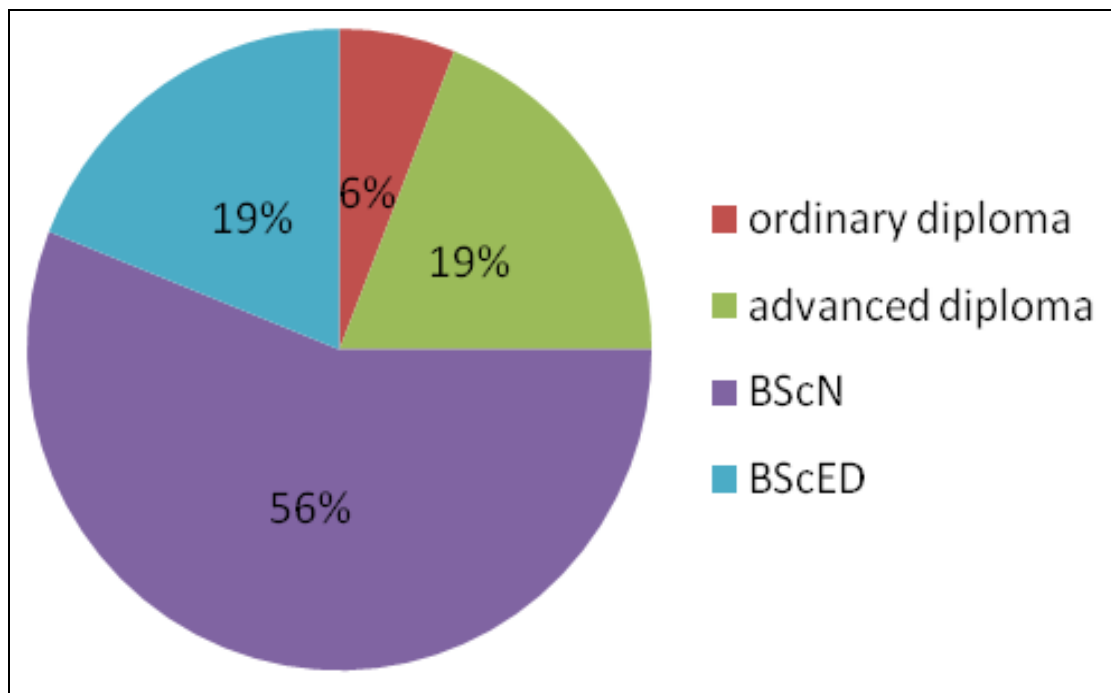
<b>Years</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 2 years	2	13
2 – 5	2	13
6 – 10	4	25
11 – 15	5	31
16 – 20	1	6
21 +	2	13
<b>Total</b>	<b>16</b>	<b>100</b>

Source: Field Survey Data, 2015

#### **4.2.4 Education Level of the Respondents**

Education qualification is the key factor in nursing education as it has positive contribution in management of education activities and learners in training institutions. In this study teaching staff were required to provide their academic qualifications. Figure 4.2 presents education level of teaching staff in nursing field. In particular, most of the teaching staff 56% had Bachelor of Science in Nursing (BScN); where 3 (19%) had Advanced Diploma in Nursing Education, (ADNE) and another 3 (19%) had attained Bachelor Science in Nursing Education ( BScNE), Apparently, the findings implies that nursing education is facing challenges of having unqualified trainers or trainers with low professional education. Therefore, there is a relationship between teaching staff qualifications and academic

performance of student nurses towards final nursing examination as TNMC requires prepared tutors, lectures, preceptors and mentors for nursing education who would meet the outcomes that are defined by standards of proficiency for preparation of teachers of nursing and midwifery (TNMC, 2007).



**Figure 4.2 Respondents Professional Education Level**

Source: Field Survey, 2015

### **4.3 Factors Influencing Poor academic Performance for Nurses' Student**

The results presented in Table 4.5 presents data on respondent's perception on the adequacy, reliability, relevancy and capacity of none and human resources, organizations of learning and teaching environment, appropriate use of instructional materials and time as well as clinical support and supervision degree in education practice.

**Table 4.5 Factors Influencing Low Academic Performance of Nurses Students**

S/N	Factors	Response	Frequency	Percentage
1	Adequacy of teaching staff	Yes	24	29
		No	86	78
2	Teaching staff ability to manage classroom	Yes	45	41
		No	64	58
3	Enough time for classroom teaching	Yes	82	74
		No	28	26
4	Relevant books in the school library	Yes	31	28
		No	79	72
5	Enough time to practice in the clinical areas and skills laboratory	Yes	44	40
		No	66	60
6	Regular clinical follow-up and teaching	Yes	15	14
		No	95	86
7	Availability of specific and adequate clinical instructors	Yes	24	22
		No	86	72
8	Conducive clinical areas	Yes	86	78
		No	24	22
9	Conducive dormitories	Yes	65	59
		No	45	41
10	Conducive classroom	Yes	96	87
		No	14	13

Source: Field Survey, 2015

Table 4.5 indicates that majority of respondents, 86 (78%) reported that the schools have inadequate number of teaching staff following retirement, natural attritions and freezing of government deployment. 64 (58%) reported that teaching staff not able to manage the classroom as they lack skills and techniques in teaching following government freezing of nurse tutors college. Inadequacy reference books was stated by 79 (72%) of the people interviewed. Students have to share books while some reference books were not available in the college. However, 66 (60%) of respondents reported lack of adequate time for both clinical and skills laboratory practice a contributory factor to low academic performance of nursing students.

Learners experienced missing of regular follow up and support from teaching staff by 95 (86%) since the clinical areas staff are inadequate (shortage) to be allocated with specifically task as reported by 86 (72%) and teachers visit them once in a semester mainly during practical examinations. 72 (79%) respondents feels that time for curriculum implementation is limited thus could not able to learn all necessary skills at clinical areas. Student support in the clinical areas reported to be inadequate since the available clinical areas staff are inadequate to be allocated with specifically task as reported by 86 (72%).

Learning environment such as classroom, clinical areas and dormitories to some respondents were conducive and support them to learn. While on the other hand, 82 (74%) respondents declared facing some difficulties in implementing curriculum due to inadequate time to teach students at a required standards as they could not teach all course contents or topics, The study findings shows that most of schools libraries contained outdated field books, not well arranged, no chairs or tables for students to sit, skills laboratory as well found with inadequate and outdated equipment and supplies, not well organized to learners demands. Thus, a significance relationship between student performance in education system and availability of stated variables in this study was proved. It also implies that quality education performance is contributed with various factors including availability of equipment and organized materials in the skills laboratory and library. It also requires capable and adequate teaching personnel as well as enough time for curriculum implementation both clinical and classroom as well. Time for clinical practice is inadequate for students to acquire necessary professional skills

### 4.3.1 Clinical Areas Follow-Up and Supervision

Appropriate supervision of students in the clinical areas provides chance for individual learning through interactive techniques between the supervisor and learners. It was found that there is a tendency of less visit to students as 15 (14%) of the respondents commented that teaching staff visits students in the clinical areas while 95 (86%) declared not visited and supervised (Table 4.6). Following interviews teaching staff had notion that could afford teaching and follows students in the skills laboratory as it is more modern and updates technology of impacting skills to students.

Furthermore, most of teaching staff 12 (75%) have answered that they prefer to supervise students during semester examination only (mean once in a semester) with reasons of being very busy to other education activities including extra curriculum events. The trends seems to be significance to the study as a contributing factor to low nursing students performance since they lack adequate support and guidance in clinical learning which is very important in acquisitions of competences and experiences. The practice is contrary to what has been stipulated that safe and effective practice requires a sound understanding of the theoretical knowledge which informs practice, and is turn informed by individual direct practice in relation to given knowledge and integration (TNMC,2007) .

**Table 4.6 Regularly Follow-Up and Teaching in the Clinical Areas**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	15	14
No	95	86
Total	110	100

Source: Field Survey, 2015

### **4.3.2 Classroom and Clinical Areas Support by Teaching Staff**

Learning and teaching by demonstration always assist the individual learner's to cope with the system. Teachers are supposed to transmit knowledge, skills and attitude of a specific practice by using relevant materials at the right time and in the right way. Teaching students in clinical areas helps to transfer audio-visual circumstances of learning, i.e. classroom and skills laboratory into actual practice, resulting in the development of confidence, competences and assurance for safety professional achievement. In the absence of guidance from proper teaching staff students feel neglected as nobody seems to pay attention to them and finally they lack competency in some essential procedures. Table 4.5 showed that 99 (90%) of teaching staff had inadequate support to students in clinical as they have no time for clinical follow up and teaching. Their response of being overwhelmed with various education activities including marking of students classroom assignment, shortage of teaching staff and lack of equipment were reported as among the challenges for effective implementation of curriculum. The situation in nursing eventually invent to students a characters of not going to the clinical areas as there due to lack of assurance for clinical supervision and support. However, collaborative spirit and teamwork among teaching staff and clinical staff found not existing resulting to lack of clinical support from the clinical with reasons of being overwhelmed by patients and resources limitations.

### **4.3.2 Availability of Clinical Teaching Materials**

Presence of adequate teaching materials including supplies and equipment enhances learning in nursing education. Good and adequate prepared instructional materials

could affect students' learning experience in required competences. The findings show that there is a critical shortage of instructional materials as pointed out by 84 (77%) respondents. These materials included equipment and supplies to perform nursing procedures. However, lack of equipment such as thermometer, BP Machines, general supplies was severely observed in the hospital wards. Evidenced by schools have being sending students with all materials in the clinical areas "we had to buy these equipments for our students, otherwise they would not go for practical training and gain skills". This fact is supported by results reported by students on inadequacy of teaching staffs and materials in the clinical areas by 66 (60%).

Generally, the study findings entails on the current practice in the health care facilities, the inadequacy of equipment and supplies for service delivery impair students' learning and general practice in health system. Principals were asked about their experience on the current situation in the clinical areas. Principals had the following words to say, *"sometime we had to incur expenses for sending our students to clinical areas with all necessary materials for clinical learning while the same time we are asked to pay to the hospitals 10,000/= (for each students in a semester) being charges for clinical teaching and all consumptions. But our student always feels to fail to see these materials and even a support from hospital staff"*(Field survey,2015)

The finding shows that shortage of necessary equipment and materials for classroom as well as clinical teaching was also impaired to most of the schools. 79 (72%) shows inadequacy of materials; these materials include relevant reference books,



charts, notes, teaching materials such as LCD, computer with internet connection, equipment and supplies for midwifery demonstration practice. However, awareness on different types of instructional materials among teaching staff was also limited, therefore failed to dispose education contents at required standards for good performance. Most of the school's library found disorganized, closed and placed with outdated materials similarly to skills laboratory.

The results imply on inequalities on availability of quality and enough materials in nursing schools resulting into poor performance of student nurses. The practice is contrary to what has been stipulated that students are prepared to learn and practice safely and effectively to such extent that the protection of public health is assured whereas consideration focused directly on achievement of professional proficiency from the prepared program (TNMC, 2007).

#### **4.4 Trends in Nursing Education Performance**

##### **4.4.1 Performance in Continuous Education Assessment**

Table 4.7 presents the findings on the performance of nurses' students in their continuous assessment as learning evaluation modalities. Results shows that 6 (38%) of students scored very good which ranges marks range between 75% and 84% equally to grade "B". While majority of the respondents 9 (56%) perceived that students performance is good as they scored from 65-74% equally to C grade, while 1 (6%) scored at average ranges from 50-64% equally to "D" grade. When comparing to the obtained results from the final nursing examination, it shows that majority of student's scores at "D" and F grade while only few obtained at "B"

grade. Thus, the significance on poor academic performance to student's nurses towards final nursing examination was attested.

**Table 4.7: Feedback on Students Evaluation Results**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Very Good	6	38
Good	9	56
Average	1	6
<b>Total</b>	<b>16</b>	<b>100</b>

Source: Field Survey Data, 2015

In addition, TNMC reported on examination results from 2011 to 2014 (Table 4.8). Results indicate that students' performance in the final nursing examination was low compared to the scores in the continuous. The findings show that in 2011 there were 60 (5%) failures out of 1433, in March 2013 the failure rate went up to 432 (34%) out of 1270 of diploma students, were as 933 (26%) out of all 3565 candidates who sat for examinations in July/August, 2013. In March 2014, the number dropped to 178 (11%) students out of 1708 candidates were as in July 2014, 382 (8%) failed out of 3882 (84%). The situation creates enormous gap between developed education curriculum targeted outcome and the actual practice in nursing education hence complaints among the stakeholders and negative image towards nursing education system and its practice as it affect the quality of service delivery. It also creates threats among students' learning process towards outstanding performances and achievement in nursing education system. On students' perspective, they declared to be addicted with globalization issues (chatting in face-book, twitter and whatsapp) hence failing to concentrate on learning, lacking time for discussion or self-studies.

**Table 4.8: Summary of Final Nursing Examination**

SN	Year	Number of Candidates Sat for Examination	Number of Candidates Passes	Percentages	Number of Candidates Failed	Percentages
1	March, 2010	643	480	71	168	29
	July, 2010	2297	2071	90	192	8
2	March, 2011	810	712	78	83	10
	July, 2011	1493	1433	86	60	5
3	August, 2012	3858	2790	72	1016	26
4	April, 2013	789	717	91	64	8
5	August, 2013	3533	2596	73	933	26
6	March, 2014	1786	1708	89	178	11
7	August, 2014	4626	3886	84	382	8
8	April, 2015	3929	3897	62	1471	38

Source: TNMC Examination Results, 2011 – 2015.

#### 4.4.2 Assessment Modalities

Table 4.9 shows that 94 (86%) of respondents gave their opinion that they prefer to be assessed by oral, practical and written as it applicable to evaluate students extent of gained knowledge and application ability in all aspects of care. About 10 (9%) prefers to be assessed by oral practical only as it once conducted and direct measure on the specific given assignment or procedure, the remain part 6 (5%) feel comfortable with written examination only as it is easily to recall.

**Table 4.9 Student's Responses on Assessment Modalities**

Assessment Modalities	Frequency	Percentage
Oral Practical and written only	94	86
Oral Practical only	10	9
Written Only	6	5
Total	110	100

Source: Field Survey, 2015

On the other hand, Table 4.10: present findings from teaching staff shows that 9 (56%) prefer to use oral practical and written as assessment method as it measure a wide range of curriculum, while, 4 (25%) prefer to use written method in a form of group assignment, case study and essay type questions during the semester examination. The rest 3 (19%) prefer oral practical method only mainly by OSCE and OSPE recommended as simple approaches.

**Table 4.10: Teaching Staff Responses on Assessment Modalities**

<b>Assessment Modalities</b>	<b>Frequency</b>	<b>Percent</b>
Oral Practical and written only	9	56
Oral Practical only	3	19
Written Only	4	25
<b>Total</b>	<b>16</b>	<b>100</b>

**Source:** Field Survey, 2015

When the school principals asked about assessment modalities that are currently in education system and had the following words to say: *“Curriculum has properly placed evaluation mechanism only that teaching staff either are not capable, lack of commitment and interest to proper evaluation process, for example setting of simple assessment questions or group assignment for easily marking due to their ability to construct relevant assessment tool and laziness”*. Another principal had this to say, *“Probably teaching staff both in clinical and classroom are not aware on how to conduct learning assessment resulting into poor student performance since they are found to perform well in continuous assessment but in the final examination they score at marginal grade (i.e. “D”* The third Principal had this to say, *“ using OSCE and OSPE as a an evaluation methods, I see the situation would lead student*

*nurses to feel irresponsible in learning, resulting in failure in professional performance.” (Field survey, 2015)*

On observation, it is seemed that student evaluation modalities is well placed in the curriculum but there is a greater difference on the methods of assessment used by teaching staff in nursing schools resulting into varying performances of students in the final examination. Therefore, need close monitoring and supervision to teaching staff on proper conduct of assessment to enhance student's performance in nursing education system.

#### **4.4.3 Duration for Curriculum Implementation**

The study found that time for curriculum implementation in nursing aspects seems to be inadequate and therefore affects students' performance. Table 4.11 (b) results shows that time for clinical practice is inadequate by 10 (63%) while 6 (37%) have less response as they declare to have large contents to cover in minimal time. While, Table 4.11(a) shows that 72 (66%) students responds for inadequate time to learn as they experienced short duration allocated for clinical areas practices, thus could not able to gain adequate skills in performing various nursing procedures and 38 (34%) satisfied with allocated time.

**Table 4.11 (a) Students' Responses on Time Set for Curriculum Implementation**

<b>Is time enough for Curriculum Implementation?</b>	<b>Response</b>	<b>Percentages</b>
Yes	38	34
No	72	66
Total	110	100

Source: Field Survey, 2015

**Table 4:11 (b): Teachers' Responses on the Time set for Curriculum Implementation**

Is time enough for Curriculum Implementation?	Response	Percentage
Yes	6	38
No	10	62
Total	16	100

Source: Field Survey, 2015

School heads and units in-charge in nursing education was asked about their satisfaction with curriculum duration and education delivery model. They had the following to say: *“There is a lot to cover in classroom in a given short period of time, and students are given only a short clinical rotation, it is like a marathon, it also demotivates teachers. Thus, they suggested for addition of time. Time allocation for curriculum implementation not enough as I am supposed to finish all curriculum content within a short period of time give. Therefore, I had to rush in some of the areas. Therefore, student may not get all contents which in-turn resulting to failure in their examination. Core subjects such as basic nursing, medical surgical nursing and midwifery were located with fewer hours that lead most of the sessions and topics left uncovered or given to students as an assignment to complement the class hour. Previously nursing curriculum was implemented in 4 years duration divided into 8 semesters, where each semester were allocated with enough hours to cover all allocated contents (Field survey,2015)*

Before 2008 nursing course was sequentially arranged in 4 years for diploma program and 3 years for certificate program thus provides more time for students to gain competences as they had enough time given to practice in all disciplines of

curriculum contents. Teaching staff as well had appropriate time for learning content and materials preparation, teaching and supervision resulted into good performance. In this study seems there is a difficulty in implementation of curriculum based on its given duration of 3 years for diploma and 2 years for certificate program, contents and organization.

#### **4.5 Measures to Address Factors Contributing to Poor Academic Performance of Nurses' Student**

On the aspect of curriculum implementation duration which is currently 3 years for diploma and 2 years for certificate it was suggested that duration for this professional curriculum to be changed as to provide adequate time for students nurse to acquire all necessary competencies as showing in Table 4.12 shows that 13(82%) respondents suggested 3 years learning duration for certificate program and 4 years for diploma. However, 3(18%) prefer 4 years for both levels as would be appropriate time for effective implementation of nursing curriculum.

The proposed change of curriculum duration based on the facts that would alleviate the existing situation and complaints from the public through production of integrated competent nurses who will provide quality health service at the public satisfaction level. Having adequate time will also enable students to fulfill learning needs mainly on practical's, covering enough contents of core subjects, and also places all necessary content areas in the curriculum.

However, curriculum awareness and its implementation approach to teaching staff considered as necessary demands to improve students' performance. Thus, require

them to have a schedule for all teaching staff orientation and updates on any changes related to education and training management. However, information from the interviewed teaching staff thought that being involved in the process of curriculum review would provide opportunity to discuss and suggests on major areas for curriculum improvement as on the way to implement before it is circulated for use or implementation. One teacher said, *“we are the main stakeholders, we need proper and fully involvement in curriculum review to share difficulties we are having in teaching”* Therefore, Ministry of Health and Social Welfare (MoHSW) should consider taking immediate action in reviewing the existing curriculum to meet the learning and public needs as it will bring into the market qualified nurses with all required competences for proper caring.

**Table 4.12: Duration for Curriculum Implementation**

<b>Suggestion duration for curriculum implementation</b>	<b>Frequency</b>	<b>Percent</b>
3yrs for certificate and 4 yrs for diploma	13	82
4yrs for certificate and 4yrs for diploma	3	18
<b>Total</b>	<b>16</b>	<b>100</b>

Source: Field Survey, 2015

In addition, suggested for additional of skilled human resources at least for the school to have 4 qualifying teaching staff as could facilitate proper teaching and learning. It also need for updates and adequate reference books to be placed in the library, adequate equipment and other instructional materials to be considered for the skills laboratory and classroom teaching functions at the required standards. On interview one of the teaching staff had the following to say *“ the MoHSW to seek for*



*a proper supplier of all standardized teaching materials and books to facilitate its availability for schools to procurement process”* For clinical areas teaching there should be a specific allocated or employed qualified nurses who eventually oriented as mentors/clinical instructors for students

#### **4.6 Discussion of the Findings**

Good performance of student nurses is the expectation of all stakeholders who are main concern in the entire education and training system. Perceived notion by student nurses, academic staff, principals’ and nursing leaders on performance of students shows that, there are various factors that impair nursing education system in Tanzania. Their perceptions focused on the current knowing ideal practice in education system and its relation to the portrayed quality of performance of employed nurses and midwives in health care facilities.

##### **4.6.1 Factors Influences Poor Students’ Performance**

Inadequacy of qualifying teaching staff was observed and ranked higher, where 54% shows number of BScN being employed as teaching staff in nursing training schools while had lack of teaching methodological and approaches in nursing education setting. This implies that the conduct of nursing training is under unqualified personnel operations hence poor performance in nursing education. The findings supported from interviewed respondents who explained the weakness shown by directly posted teachers in nursing schools. One interviewed teacher said that, *“they are not committed and are afraid to go for clinical teaching since they are even not experience to perform various nursing procedures”*. In addition, it was

reported by the heads that, nurse teachers without teaching methodology failed to fulfill the undersigned job assignment, most of them are not committed, insufficiently and irresponsible.

The study by Areola, (2000) found that, inadequacy of qualified teachers coupled with the shortfall in material resources affects the practical skill acquisition required to produce skilled graduates. If teachers handling nursing training are not well prepared therefore could not be able to impart the appropriate or the required knowledge to the student's hence poor academic performance trends in the final examination as manifested by high failure rate and incompetence graduates. The notion within individual s, mind resulted into thinking of producing half backed nurses resulted into poor quality of health care delivery.

However, Nursing Regulatory Board (TNMC) understands that education in skill-based courses requires not only facts and information but also involves changing people's attitudes towards its proper direction (TNMC 2007). This insists on prime requisites for successful implementation of educational programs should be under qualified teachers who are occupationally competent and skilled in the use of teaching methods. The Tanzania Nursing Education Regulations of 2010 recognize in respect of the qualifications of teaching staff with professional qualification on diploma in health education and personnel, advanced diploma in education and degree in nursing education. Therefore, they are expected to have professional qualifications with intensive teaching methodology and education management training, registered under Part VII of the roll (TNMC Act, 2010).

A study conducted by Zuzovsky (2013) commented on the certified teachers who graduated from accredited teacher education programs and passed national teacher examinations and licensed to practice as a nurse tutor. In Tanzania the same system is applied but there is a debate on recognition of teachers between those who demand full certification by having induction course in teaching methodology following degree course in nursing. In addition, Fajonyomi (2007), in this study is remarked that the success of any educational enterprise depends largely on the availability of professional teachers. This is possible because the trained teachers are well prepared on technical knowhow for effective learning to take place in the learners. The qualities of good teacher who practicable required in the nursing training schools include these who could master the subject matter, having sense of organization, ability to clarify ideas, ability to motivate students, good imagination, ability to involve the students in meaningful activities throughout the period of teaching, management learning details, and frequent monitoring of students' progress through tests, formal and informal, written and oral quizzes.

Moreover, Omari (2011) states that, good teachers' includes these who can perform their responsibilities with great commitment as pre-requisites for successful and excellent education. Apparently, the study findings showed that, there is a limited skill among teaching staff that are currently in nursing education in Tanzania. The situation influences academic performance of nurse's students. Therefore, study findings confirm that there is a positive relationship between teaching staff qualifications and academic performance of student nurses towards final nursing examination.

Adequacy of teaching staff and performance of student nurses is referred to the number of teachers who could conveniently handle a given number of pupils. It is measured in terms of a ratio. Like any other good in the market, equilibrium between demand and supply of teachers is very vital for the progress of the larger education sector.

The quantity of any good or service demanded is the number of units consumers want to buy, while the quantity supplied is the number of units sellers want to sell (Baume and Blinder, 1988; Waweru and Orodho, 2014). Therefore there should be equilibrium between demands of students and number of teaching staffs for quality teaching and learning.

Number of teaching staff available in nursing schools and perceived students' academic performances was intended questions to assess whether nursing schools had adequate number of teaching staff to deliver nursing training. Normal ration of teachers-students in nursing training school is 1: 10 students for diploma 1: 15 students for certificate programs. Therefore, for a school to run nursing education program should have not less than 4- 5 full time employed nurse tutors. Results showed that out of 110 students, 86 (78%) sees that there is inadequate number of teaching staff at the schools.

The maximum numbers of qualified teaching staff observed were 1-3 nurse tutors. The situation from the findings denote extremely severe shortage of nurse tutors in

the nursing training schools therefore could positively affect performance of students in their education program towards in the final examination.

On other hand interviewed participants including Principals' and MoHSW officials (83%) revealed that shortage of teaching staff is a challenges as one of the major factor leading to improper curriculum implementation. The aforementioned findings were highly supported and complemented by the quantitative results by Ngada (2008) in Fajonyomi (2007) who revealed on severe shortage of resources to implement the program mainly teaching staff in all angles with emphasis that the success or failure of any educational programmed rests majorly on the shoulder of adequate number of qualified (professional), competent and dedicated teachers.

Furthermore, Seweje and Jegede (2005) note that the ability of a teacher to teach is derived not only from one's academic background but also upon outstanding pedagogical skill acquired as well. Olarewaju (1986) once submitted that students' low performance in physics is due to the teachers' ignorance. Adeniyi (1993) also supported the findings when he observed that the manpower development is a function of qualified teachers. Similarly to Okendu (2013) who marked on administrative perspective on availability of manpower, fund and instructional materials in education setting as harnessed for educational goals attainment. The administrator fulfils such demands by implementing policies linked to organizing, allocating harnessing human and material resources within the school system in order to achieve the stated objectives.

Nursing education practice found to be under management of few numbers of teaching staff and some with professional qualification. This to a certain extent would be a major concern in influencing student's performance in education towards their final nursing examination to be substandard. The employed majority were these through Benjamin Mkapa Foundation who were directly from schools without any capacity in teaching. The situation creates a remarkable gap in nursing education practice in Tanzania as they had no experience and skills on classroom management as well as clinical teaching. The results supported by Niche (2010) who reported the situation in Tanzania were employment of unqualified teaching staff in the nursing training since 2008, whereby nurses with general diploma or Bachelor in Nursing Science have been employed to implement the Primary Health Strategy (MMAM). The results evidence that, 56% of available number of employed teaching staff had lack of teaching methodology as well as 86% of them did not make follow-up and teach students in the clinical areas.

More supportive information was revealed by Harris and Sass (2007) on the relationship between teacher experience and student achievement were the findings indicated that less effective teachers are more likely to leave the professions since appears that experience raises teacher effectiveness in their work and with better opportunities.

Relevant materials such as books and functional libraries are important in any academic settings. Availability of books and all materials that are necessary for illustration know as instructional materials. In nursing education various materials

are obtained for both applications in order to stimulate learns. Material such as textbooks, anatomical charts, posters dolls, manikins, skeletal bones, various instruments which are used in performing nursing procedures, chalkboards, audio - visual and electronic instructional materials such as radio, tape recorder, television, CD, DVD and video tape recorder and others are the key important in simulation of learning among students. In nursing school skills laboratory practice was introduced in 2010 concurrently with the implementation of CBET curriculum aiming to arouse learning and teaching towards professional competences acquisitions (MoHSW 2008). The results showed that (72%) respondents face difficulties in obtain reference books instead had to search from internet in their own mobile phone and borrow notes from other colleges. On observation of the school library it was found that out of 8 schools (63%) school library were disorganized, had few reference books, journals and various national health guidelines and manuals, limited with tables and chairs. Furthermore, there is lack of adequate and updated learning and teaching materials as listed in the nursing curriculum. The study finding reveals the some of the materials are found in nursing schools as were supplied by donor through MoHSW some bought through schools cost sharing as private schools. Amazingly, in some schools there were no skills laboratory or library and the few available materials found been locked in a room, only collected when necessary. Teaching staff had to carry them from on station to the class for demonstration, this situation could total affect learning and teaching process.

Availability of instructional materials serves as an aid for instruction. Its inadequacy would make teachers not able to make their strategies in teaching in an effective and

meaningful manner, as well as making students to learn and understand their lesson and acquire the skills necessary in the field. Having adequacies number of instructional materials in nursing school will support the student's effective learning and influence its own demand in the educational system. More support on this findings reported by Bullough (1987), who said that a teacher's job does not end in managing the classroom, planning and evaluating but major expert must be on instructional materials which has a big impact in teaching and learning process as it influence student's enthusiasm, involvement and willingness to learning process. Instructional materials serve as a vehicle for improving the quality of learning for every student. It depicts the reality of idea and typical answer of different questions.

Also, Likoko (2013) suggested that the quality of utilized instructional in education provision help to facilitate the whole experience by a learner determines quality of education. Also supports that students performance is affected by the quality and quantity of teaching and learning resources. Therefore, for nursing schools with adequate facilities such as textbooks stand for a better chance to perform well in examination than poorly equipped ones. Bloch (1959) stated that factors such as areas for practice, teaching materials availability, teachers' modalities and assessment criteria's are among the motivating factors that impose the way that learning activities being set and the area of competencies needed. Therefore, having adequate equipment in the skills laboratory work as motivational factor to mould and substitute nursing roles into student's minds to insight for their future profession through systematic practice under s role models materials that mostly influence them to clinical education. The situation seems to become a major contribution to student's



performance in low score since they failed to related and develop competences needed in education resulting to poor performance.

However, utilization of appropriate instructional resources would make discovering of facts and form a permanent memory into students mind. Akinyi (2013) added that, a well-planned and imaginative use of visual aids in lessons considered to expel different view and focused creativity as it arouse students' interest by giving them something practical to see and do, and at the same time helping to train them to think things out themselves. The study reveals on the findings where only few schools contained with visual aids, most the private schools found to be better than public schools which are starving with scarcity resources following inadequate budget therefore the situation could not support for effective learning and teaching within the classroom and clinical if basic instructional resources are not present.

However, close supervision and follow-up in education system enhances more chances for learning as it help to assist and direct student nurses to understanding what they learn in class. In nursing education learning environment divided in classroom and clinical areas, and both need to have follow-up. In clinical areas teaching staff are supposed to make close monitoring of students' attitude and practice in co-operation with clinical staff. Curriculum setting has clinical hours that need a learners to be guided by senior staff and teaching staff. In Tanzania nursing curriculum has ratio of classroom to clinical hours of 1: 3 hours whereby 1 week is given 30 hours for both clinical and classroom. A teaching staff required to implement a range of 7-16 hours in classroom and 7-16 hours in clinical areas per

week (MoHSW, 2009). Failed to attend clinical areas with reasons of being engaged with many activities outside the school and classroom assignments, shortage of staff, lack of interest to attend clinical areas has resulted into poor performance of the student nurses in education system. Inadequacy of teaching facilities and supplies in the clinical settings for demonstration as well as lack of unclear structure and communication between school authority and facilities were also affect the practice. According to MoHSW (2009) insisting on importance of learning and teaching by demonstration and considered installation of skills laboratory in the nursing schools that would improve learner's skills and attitude of a specific practice by using relevant materials at the right time and in the right way. Reid (2000) supported the study by stated that the criteria for effective learning in nursing education is clinical competence as it has been cited as the final goal of nursing education. It includes skills of utilizing knowledge and information, communication and interpersonal skills, problem-solving and technical skills. TNMC, (2007) emphasized that in education the practice part of the program should provide the opportunities for a student to experience 24 hours care divided into morning, evening and night shift clinical practice. This would provide chance to develop understanding and broad experiences in discharging health care.

In addition, Keating (2006), evident that the learning environment or climate is of outmost importance for student's positive learning experiences and that anxiety can contribute to decreased learning. Tutors and preceptors can create a climate of mutual trust and respect that supports learning and student growth. Thought that when students feel supported, they tend to ask questions and seek answers without

fear of being thought of as dumb or incompetent. The responsibility for creating and maintaining a good learning environment are mutual, thus, teachers have the ultimate responsibility to establish this climate. Thus, inappropriate supervision of students in the clinical areas lead to low number of student nurses performance as they receive limited support in integration of knowledge and skills, limited number of teaching staff pledged a major contribution as well as their commitment. Therefore, from this study nursing faculties are one of the organizations responsible for promoting clinical competence, need to be a role model even from their students to satisfy the needs of society and train nurses who have high-level of clinical competence.

On the other hand, student nurses' clinical competencies are significant outcome of effective learning in nursing education presented by ability to effective integration of cognitive, affective and psychomotor skills when delivering nursing care. Its achievement is based upon proper support of teaching staff and conducive learning environment ( MoHSW, 2008).The situation in this study found to be opposite to what has been emphasized by the National nursing curriculum and education policy on the need to ensure quality control through regular follow-up of students and continuous supervision of students on how to perform various core procedures, uses of clinical instructional materials and other educational services as is deemed right to enhance classroom work into clinical base through direct contact with patient and skilled nurses (MoHSW, 2008).

Concern the methods of teaching, both in fundamental modules and clinical practice, nursing curriculum utilizes a broad range of study methods and approaches. These

include lectures, lecture discussion, tutorials, assignments, clinical training including demonstration/laboratory practice, study tours, case study, role plays, group discussion, field work and field visits, simulation, gallery walk, coaching, clinical nursing conference and supervised practice (MoHSW, 2009). Inappropriate utilization of this methods resulted into student ineffective learning. Respondents were required to provide information on assessment methods and the constraints felt. Group teaching and assignment was seems to be the commonly mode of assessment as it is simple in conduct thus exaggerate them into poor performance as they don't have enough resources and support to mountain their learning. Students prefer to study in groups since they don't have reliable given notes and references; therefore they got an opportunity to share in group from each other materials. *"Commented that work hard to find materials from various source including previous students and other schools in make them to pass examinations".*

This finding is similar to other studies (Edina, 2011) who stated on reasons that makes student fails or gets less marks in examination. She reported on mental approach towards study, attendance in lectures, method of preparing for examination, examination taking tactics and strategies for examination conduct as well, making good and helpful notes that would direct students relevant areas for memorizing, and concentration make him succeed in examination. Thus, brilliant student pays attention to all the factors which make him pass or succeed in examinations.

Learning environment provides good setting for learning and at the same time acts as a participant in teaching and learning, it act as a tactile-audio-visual learning

stimulations. Information on learning environment was focused to classroom, dormitories, and clinical areas, social and economic surroundings. In some schools about (50%) dormitory environment were overcrowded, dirty hostels breached water system and sewage too due to old infrastructures mostly in public schools. Thus, could influence risk of infection and health hazards, hospital facilities were reported overcrowded with patients with no enough equipment for caring. The situation can support, impede learning opportunities for students.

The findings is similarly to other findings by Hakimzadeh (2013) who said that learning environment has been described as influencing the development of student cognitive, affective and psychomotor skills as they apply all sense of mental ability, mechanical and attitude in performing of learning process in required standard. Also, clinical learning environment and curriculum with self-efficacy had the greatest impact on clinical competency and learning in nursing education. In this situation the findings reveal that curriculum and learning environment can have a significant impact on the learning and training of competent nurses therefore should be taken into consideration as being very important both academically and social support in learning process.

#### **4.6.2 Trends of Nursing Education Performance**

Duration of nursing training is 3 years for diploma while for certificate is 2 years. Curriculum has a total of 44 weeks of study in years, which are divided in two semesters of 22 weeks, 11 weeks set aside for theoretical training and 33 weeks are designated for clinical practice (Ratio of theory to practice 1:3) (MoHSW, 2009).

Proper allocation of time enhances learning to the maximum output within the specified period of time for each particular input. The implementation of nursing curriculum found to be in critical situation to cover whole the contents in a short duration. The trend seems to contribute in poor students' achievement in education process as well as professional efficiency since they lack the necessary required skills to execute the duty. Majority views on the curriculum content being condensed with many contents compared to allocate time hence make students and teaching staff suffering for achievement within a constraint situation. One interviewed teacher said that, *"There is a lot to cover in classroom within a short time, and students are given only a short clinical rotation, it is like a marathon, it also demotivate us"* Thus, setting of nursing educational curriculum should focuses to learners, teaching staff and the expected customers' demands in the system as it is supported by TNMC, (2007) standards on the context of practice , that individual students must practice in all core areas from childhood to adulthood health aspects in order to gain different contexts of nursing that are define within the scope of professional practice.

However, right commencement of learning program in regard to standardized sets of time, would attribute good students' performance as it will provide adequate time for learning. In nursing program it is currently experienced to commence in a very late dates in November/December instead of August/September. The main objective of assessment is to set a comprehensive system of measuring the achievement of the learning outcomes. It provides a yardstick for which the expected outcomes and benchmarking items are evaluated. This aspect has two major components, one for measuring performance and achievement while the other is for evaluating the

achievement of the goal as well as ascertaining whether the teaching and learning processes are efficiently and adequately attained (MoHSW 2009). Student's assessment in any education system considered is an integral part of the clinical educational process with the intention of assuring student quality, but also to continually provide feedback about strengths and weaknesses in students' performance in education system.

Students mode of evaluation implicate its achievement, proper utilize methods of assessment provides better outcome. Trends of performance in continuous assessment was found to good to excellent but when it comes into final nursing examination especial for registration and licensure examination majority performance read on satisfactory, only few score at good grade while others failed. Using OSCE/OSPE method of assessment in evaluation of students one may say that it creates an opportunity for discrepancy between clinical teaching and performance to students nurses. The situation may lead student nurses to become irresponsible in learning, resulting in failure to attain professional incompetent. Results account for positive relationship between the assessments methods of evaluation and students' academic performance towards final nursing examination. The situation in this findings seem that students tends to score higher in continuous and semester progress but fail in final nursing examination were the critical analysis of academic performance is intensively conducted (TNMC, 2014). The situation creates many complaints among the stakeholders resulting in negative image towards nursing education system and its practice. This finding is similar to Schilling (2002), who stated that student's assessment in an education setting is a paramount session. It

portrays individual progress, guide in decision making and selection of best modalities of education instruction and implementation. Formative assessment may be iterative, occurring periodically throughout the training period. However, summative evaluation is cumulative in nature and act as existing window in education system. Ideally, summative evaluation activities are strategically implemented to understand more about learners' long-term retention. The study outcome reveals substantive scores in the final nursing education thus need to improve assessment mechanism for student nurses

Currently, technology use of machine and sophisticated media of learning affect student's performance in education perspective. The use of mobile phone for searching learning materials is commonly practicable in most of training institutions including nursing schools. The situation creates many challenges as it consumes individual time in globalization issues (chatting in face book, twitter and whatsapp) and less concentration to learning schedule. Thus, their outstanding performances and achievement in nursing education system became a nightmare to most of student nurses in Tanzania.

#### **4.6.3 Measures to Address Factors Influencing Low Academic Performance**

Results show that there are several challenges facing nursing education system which need efforts to solve them. The remarkable measures are here as given by respondents. These measures range from policy, social environment, materials and resources. Technology advancement in nursing education was found as a major challenge. In addition, changes made by NACTE curriculum versus traditional



curriculum that insist on modern application system versus traditional concepts, utilization of skills laboratory for competence acquisition, poor motivation/working, morale by clinical staff hinder proper clinical instruction leading to poor performance to students. All were considered as priority demands that needed to be addressed in improvement of student's performance in nursing education.

Therefore, suggestive measures were considered as follows: duration of curriculum to be considered for review and additional of time mainly in core subjects such as midwifery, medical surgical nursing, and basic nursing and mental health or reduction of content which found not necessary in nursing course. This opinion is supported by David (2004) on allocation of time for instructional should be based on the priorities that have been established to allow adequate breadth coverage while maintaining enough depth to assure that students are learning the material. The process involve specifying the curriculum in a subject matter and domains that requires cataloging in the various types of information including facts, concepts, principles, and procedures and setting priorities with respect to outcomes.

Increase the number of teaching staff is very important especially for education teachers who can ably support students through the process of transition to professional life since many new teachers are entering the field without the specific knowledge and skills needed to support transition. Miller, Lombard and Hazelkorn (2000) reported that few special education teachers have received training on methods, materials, and strategies for developing meaningful learning that include goals and objectives on transition or specifically address the student's transition

needs through the curriculum and instruction. Further, many special education teachers underutilize community work-experience programs and fail to coordinate referrals to adult service providers. Therefore, it is necessary to consider additional of skilled teaching personnel in the nursing school who could properly acquaint the curriculum.

Skills laboratory and library to have adequate and updated reference books and teaching materials consequently with teaching staff being oriented on proper utilization and implementation of CBET curriculum. Motivation to teaching staff by giving them orientation and frequently professional development training for both clinical and classroom teaching is important to raise their motive for supervision and follow-up of students. Similarly the study by Linda and Taymans (1995) stated on ensuring that special education, vocational rehabilitation, and human services personnel possess the skills and knowledge required to address the transition service needs of youth with disabilities. These efforts should include cross-training, alignment of information to promote common understanding, an emphasis on collaboration across groups, and commitment to securing outcomes.

In additional, selection, appointing and employment of competent mentors and teachers who will be committed in instructing students in the clinical areas would be effective in improving student performance in education process and in final nursing examination. The opinion is similarly to that stated by United Nations Educational Scientific and Culture Organization (UNESCO) in Kenya 2012 on the current demand-driven recruitment policy which was put in place to address the

uneven distribution of teachers and teacher's shortages whereas the recruitment has been done to replace teachers who leave the service through natural attrition. Therefore the MoHSW has to meet this demand of a growing need for more teachers to cope with higher demand for nursing curriculum implementation at the required standards by bridging the gap of shortage.

## **CHAPTER FIVE**

### **5.0 SUMMARY, CONCLUSSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents summary, conclusions arising from the study and recommendations, which could improve students and teaching staff academic performance.

#### **5.2 Summary**

This study focus on factors influencing low academic performance of nurse students in certificate and diploma programs towards final nursing examination This study was very much concerned in identifying factors leading to low academic performance in order to provide modalities to deter the widespread of low academic performance towards the final nursing examination among student nurses and midwives in nursing schools in the Eastern Zone. This study was guided by three specific objectives. The first objective was to identify factors influencing academic performance of nursing students' in final nursing examination for Certificate and Diploma programs; second, to examine trends in academic performance in the nursing education and final nursing examination for nurses in Certificate and Diploma Programs; and to suggest measures to address factors leading to low academic performance towards final nursing examinations. Research questions were set to gather response from the targeted study population. A total of 138 participants were involved in this study from the 8 nursing schools comprised of three government schools, four private schools and three faith-based organization schools.

Among those, 60 participants were certificate students, 50 diploma level students, 16 teaching staff, 8 principals and 4 officials from different levels of leadership in nursing field.

Theoretical literature were based on the application of Learning theory on behavioral change based on teachers ability in proper manipulation of learning materials, environment and other modalities in stimulation of student behavior. Orem's theory of self-care deficit identified the nursing practice as a science in all care activities, thus, the theory applied as nursing curriculum development framework as it describe all necessary roles, functions and responsibilities one should accomplish to become a nurse practioners. Hygienic and Motivational theory by Herzberg was also considered provision and applications in of available key resources and conducive working environment stimulates entailed as predominant to positive performance and effective outcome.

However, study literature review focused on adequacy of resources as it stimulate cognitive, effective and psychomotor ability of the students. Maruff, (2011) stated that , during the entire course, students are expected to acquire knowledge, incorporate critical thinking and psychomotor skills, develop self-confidence in their abilities, and then transfer this knowledge to the clinical setting, stimulate learners motivation and satisfaction. This can be achieved by combination of audio visual materials. Neemi, (2003) stated on qqualifications of teaching staff as mandatory to gear for proper education performance since teachers can make individual grow through proper teaching, assessment and nurturing both theoretically and practically.

Therefore necessity of skilled teacher affect the success or failure of any educational program following his/her dedication, professional values, competences derived from outstanding academic skill acquired and one's background and Okendo (2011) insisting on clinical supervision which normally consists of groups of teachers and supervisors, including subject specialists supervisors working together to achieve set out goals.

Descriptive study design was employed with qualitative and quantitative approaches in order to find facts and describes on factors which influences student academic performance towards final nursing examination in nursing educations system. Both quantitative and qualitative approach were employed for researcher to understood and derive descriptive data. Probability sampling procedure through simple random sampling was used to obtain targeted sample size from respective students and non-probability through purposive sampling was used in identifying officials, principals and teaching staff who were responsible as a class teacher and academic. Primary data was from targeted populations and secondary data source was from recorded information on student's education performances, teaching staff implementation activities including classroom time table and rotations plans. Structured open and closed-ended questions, semi-structured were used to collect data from respondents. SPSS Version 20 and content analysis was used for accurate data analysis.

The study findings revealed that, lack of required basic infrastructures to classroom, shortage of resources including qualifying teaching staff in nursing training institutions, inadequacy of instructional materials both in classroom and clinical

areas was critically experienced; clinical teaching and supervisions general found to impair students learning process by 95%. While the school's library and skills laboratory reported to have inadequacies learning resources for students to satisfy their learning needs by 84%.

However, performance of students in continuous assessment records found to be higher in comparison to results found in final nursing examination as presented in table 4.7 due to improper assessment carried by teaching staff. It also found there is a difficulty faced by students by 72% and teaching staff by 62% to provide the necessary learning since the time allocated for curriculum implementation seems to be limited. Furthermore, it was suggested for increasing time for curriculum implementation, as it will provides enough practical and classroom learning among students. Necessity for having adequate learning and teaching materials in all aspects, proper supervisions and follow-up was also considered as measures to improve students' performance in nursing education system

### **5.3 Conclusion**

Performance of student nurses is influenced by several factors identified in this study. According to the study findings it become evident that lack of qualified teaching staff allocated to nursing schools and inadequacies of them both in classroom and clinical areas impair the learning process leading to low performance. It also found the schools faced difficulties in provision of necessary and adequate materials for learning and teaching placed in classroom, skills laboratory and clinical areas and appropriate utilization was among the factors. Lack of time to implement

nursing curriculum contents hindering the process of nursing education and performance of student nurses in education program as it led to most of the topics left unattended, improper assessment procedures as student performed well in continuous assessment vis-a-vis poor performance in the final assessment and lack of supervision and follow up. However, the situation might improve by having in proper planning and budget for deployment of adequate qualified teaching staff as stipulated according to standard ratio of learning, purchasing adequate and relevant instructional learning and teaching materials including reference books, equipment, supplies, and restoration of infrastructure that are valuable for quality nursing education. It is also considered for administrators and all key stakeholder to put priorities in close follow-up of the system based on set policy standards and guidance as to influence proper mechanism and implementation of education plans for successful outcome.

#### **5.4 Recommendations**

Based on the study findings, discussion and conclusion, the following recommendations are made.

- In order to address the shortage of instructional materials which are necessary factors to influencing students' performance in nursing education, the Ministry of Health and Social Welfare should plan and solicit budget for provision of relevant, adequate and updated standardized, technological instructional materials that will be effectively utilized both in classroom and clinical areas teaching



- Noted lack of orientation and teaching methodology to teaching staff impair their capacity in implementing education system at required standard. There is a need for Continuous Professional Development through capacity building workshops to enhance teaching ability among less skilled employed nurses
- Limited theoretical and practical hours located in the nursing curriculum need for review and restructuring and allocation of adequate time curriculum to incorporate necessary contents, to allow flexibility for adequate practical and theoretical learning as it brings in competent professionals who are responsible and accountable to health care provision. Therefore, a dynamic and ongoing discussion of questions related to nursing curriculum review through involvement of all parties concerned is paramount for successful achievement in education practice in responding to the needs of Tanzanians.
- Re-establishment and rejuvenated the nurse tutor's teaching college following shortage of qualified teaching staff almost in all the schools. Since having adequate and qualified teaching staff will improve the education system
- Deployment and staff retention planning of qualified health workers should be carefully considered to bridge the existing shortage of staff and maintain the standard staffing ratio who will be very useful and actively involved in assisting students in clinical setting facilities.
- Non adherence of set standards observed as the cause effect to all main factors to low performance in nursing education activities as inadequacies of set requirement is a fault. Hence, close follow-up and supervision of nursing training facilities is necessary to ensure conformity to the nursing school establishment criteria's and education operation standards guideline.

### **5.5 Areas for Further Studies**

This research intensively focused on academic performance for student nurses in nursing schools. However, more work is required to look more intensively on:

- i. The same study could be done widely using the same or other methodology to measure the same or more variables to a greater number of sample size. This would determine whether the stated results may occur in the findings or more resulting into taking appropriate and valid administrative reactions towards the situation.
- ii. Teaching staff awareness on nursing education instructional materials and its relation to education performance among student nurses.
- iii. Teaching staff level of adequacy and their effectiveness in implementing nursing curriculum
- iv. Skills laboratory practice and its effectiveness in nursing education performance comparison to government and private schools and faith based schools of nursing.

## REFERENCES

- Abigail, B. and Bennelt, C. (2005). *Human Brain Mapping: Anatomical Changes in the Emerging Adult Brain*: Journal. No. 29.
- Adeniyi, E. O. (1993). *Trends in Teachers' Education*. Curriculum Development in Nigeria. In U. M. C. Ivowi (Ed), Ibadan. Sam Bookman.
- Adeoye, M. O, (2011) *Teaching Effectiveness, Availability, Accessibility, and Use of Library and Information Resources among Teaching Staff of Schools of Nursing: Osun and Oyo State, Nigeria*; ISSN 1522-0222
- Akinyi, O. M. (2013). *School Based Factors Influencing Instructional Performance of Teachers in Public Primary School Primary in Kadibo Division, Kisumu Country*. Kenya-University of Nairobi.
- Alabama, P. J. (2006). *Development and Issues Regarding Universal Primary Education*. Dar es Salaam, KAD Association.
- Aremu, A. O. and Soka, B. O. (2003). *A Multi-causal Evaluation of Academic Performance of Nigerian Learners: Issues and Implications for National Development*. Department of Guidance and Counseling, University of Ibadan.
- Baly, E. and Matthew, H. C. G. (2005). *"Nightingale, Florence (1820–1910)"* Oxford University Press.
- Best, J. W. and Khan, J. V. (1992). *Education Research*. (6<sup>th</sup> Edition). New Delhi. Prentice- Hall, Private Ltd.
- Bloch, B.S. (1959). *The Motivation to Work: Herberg's Survey on Hygienic Factors*. Revised 2008.

- Bogdan, R. C. and Biklen, S.K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*. New York, Pearson Education Inci.
- Bodil, T., Washil, R., Liss, M. and George, T. (2009). *Improved Health Training Education in Malawi Nursing College: Curriculum Implementation in CHAM/NMT College, Lilongwe/Oslo*.
- Broun, L. A. (1981). *Learning to learn. On Training Students to Learn From Test: Educational Research*. Vol. 10, 2, pp.14-21; Retrieved from [www.jstor.org/stable/117401](http://www.jstor.org/stable/117401) on 2<sup>nd</sup> May, 2015.
- Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approach*: Thousand Vans, CA: Sage.
- David, R.J. (2004). *NCSET: Current Challenges Facing the Future of Secondary Education and Transition Services for Youth with Disabilities in United States*: University of Minnesota, 102 Pattee Hall-January, 2004
- Edina, W. (2011). *Causes of Failure to Students*. Somaliland.
- Eshiwani, G. S. (1983). *Factors Influencing Performance among Primary and Secondary school Pupils in Western Kenya Province. A policy study*. Bureau of Educational Research, Kenyatta University.
- Fajonyomi, A. A. (2007). *Reviving higher education relevance in Nigeria. A paper presented at the 3rd Faculty of Week and Annual National Conference, Faculty of Education*. University of Maiduguri on the theme Higher education reforms in Nigeria from 26th to 27th September.
- George, N. R., Tripods, K. B., Justus N. R. and Zacharia, K. M. (2012). *Factors Contributing to Poor Performance in Kenya Certificate of Primary Education in Public Day Primary Schools in Mwimbi Division, Maara*

- District, Kenya. *International Journal of Humanities and Social Sciences*, Vol. 2 No. 5.
- Hakimzadeh, R., Ghodrath, A., Karamdist, N., Ghodrath, H. and Mirmosavi, J. (2013). *Factors Affecting the Teaching-Learning in Nursing Education: 191 Proceedings of the Global Summit on Education*; Kuala Lumpur. (E-ISBN.978-967-1168-0-1)
- Hannifin, N. Parvizy S, and Joolae, (2012). *Nursing Challenges in Motivating Nursing Students through Clinical Education: A Grounded Theory Study*: India. Retrieved from: <http://dx.doi.org/10.1155/2012/161359>
- ICN, (2013). *Definition of Nursing*. Retrieved from [www.icn.ch/.icn/icn](http://www.icn.ch/.icn/icn) on 2<sup>nd</sup> May, 2015.
- Ingersoll, M.R, (1999). *The Problem of Under Qualified Teachers: A Sociological Perspective: Sociology of Education in Canada*. Vol. 78, No. 2. pp. 175-178; (Apr, 2005) America.
- Karani, A. (2000). *Factors Influencing Quality of Nursing Education in Kenya*. Kenya Nursing Journal, Vol. 33 No.1. (June, 2005).
- Karen, M. Gordon G. and Macleod, A. (2007). *Reflection and Reflective in Health Professional Education: A Systematic Review*; Dalhousie University. Canada. Journal, ISSN 14:595-621. DOI 10.1007/S 10459-007-9090-2 (November, 2007).
- Kathuri, M. J. (1986). *Factors that Influence the Performance of Pupils in CPE*. KERA Research Report. Nairobi: Kenyatta University, Bureau of Educational Research.

- Keating, S.B. (2006). *Curriculum Development and Evaluation in Nursing*. New York: Lippicott, Williams & Wilkins.
- Kombo, D. K. and Trough, D. L .A. (2006). *Proposal and Thesis Writing: An Introduction*, Nairobi, Paulines Publications Africa.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Delhi. New Age International (P) Ltd. Wiley Eastern.
- Kyoshaba, M. (2009). *Factors Affecting Academic Performances of undergraduate. Student's at Uganda Christian University: Makerere University*. Uganda
- Lazaro, A. (2003). *Personal Environment, Family and Academic Factor affecting Low Achievement in Secondary School*. 1(1), 43.66.ISSN:1696
- Likoko, S., Mutsotso, S. and Masongo, J. all, (2013). *The Adequacy of Instructional Materials and Physical Facilities and their Effects on Quality of Teachers Preparation in Emerging Teachers Training College in Kenya: International Journal of Science & Research: India- ISSN: 2319-7064*.
- Linda, R., DeFur, S. H. and Taymans, J. M. (1995). *Competencies needed for transition specialists in vocational rehabilitation, vocational education, and special Education*. *Exceptional Children*, 62(1), 38-51.
- Maiyo, J. A. and Ashioya, L. A, (2009). *Poverty Alleviation: The Educational Planning Perspective. Department of Educational Planning and Management*, Masinde Muliro University of Science and Technology.
- Maruff, O. A., Ojebisi, A. O., Olusunde, G. R. and Isola, O. M. (2011). *Instructional Materials and Student Academic Achievement in Physics: Some Policy Implication: European Journal of Humanities and Social Sciences*. Vol. 2, No.1 (2011).

- MOEVT, (2010). *Educational Sector Development Program – SEDP II- 2010-2015*.
- MOE, (1998). *Education in Basic Education Statistics in Tanzania: 2006-2010*, Tanzania Ministry of Education and Vocational Training, June 2010,
- Mhamela, G, 2013. *Nursing History of Tanzania*, Dar es Salaam University Press, Dar es Salaam.
- Miller, R. J., Lombard, R. C., and Hazelkorn, M. N. (2000). *Teacher attitudes and practices regarding the inclusion of students with disabilities in school-to-work and technical preparation programs: Strategies for inclusion and policy implications*. In *Critical challenges facing the future of transition services in the United States*. Minneapolis: University of Minnesota, Institute on Community Integration, National Transition Network.
- Ministry of Health and Social Welfare, (2009). *Curriculum Information for Ordinary Diploma; (NTA Level 6) in Nursing*: Dar es Salaam.
- Ministry of Health and Social Welfare, (2010). *Healthy policy*: Dar es Salaam.
- Ministry of Health and Social Welfare, (2012). *Community Health services- Country report*, Dar es Salaam.
- Ministry of Health and Social Welfare, (2013). *HRH-Country Profile 2012/2013* No.987-9987- 937-07-9.
- Ministry of Health and Social Welfare, (2014). *Tanzania Pre-Service Nursing Education Assessment Final Report*. Kagera and Mara Region.
- Momoh-Olle, J. Y. (1996). *The relationship between entry grades and academic achievement at the Kwara State*: College of Education Ilorin. Retrieved from [www.westga.edudistance](http://www.westga.edudistance).

- Mosby, (2009). *Medical and health Professional in Nursing Dictionary*, (8<sup>th</sup> Edition).
- Naeem, A. (2013). *Problems and Issues in Curriculum Development and Factors Affecting Curriculum Development in Pakistan*: June 22, 2013.
- Ngada, A. J. (2008). *Impact of NCE programmed on preparation and performance of graduate teachers in Boron state Junior Secondary Schools. Research in Curriculum*, 5(1), 190-195.
- Nightingale, F. (2005). *Foundation of Nursing Profession*. University of Sourthen Mississippi College of Nursing: Philadefia.
- Okendu, J. N. (2001). *The Influence of Instructional Process and Supervision on Academic Performance of Secondary School Students*-River state in Nigeria: Academic Research International Journal. Vol. 2, No 3.pg. 2-7. ISSN-L: 2223-9553
- Olarewaju, A. O. (1986). Census of students' under-achievement. 27th Annual conference proceedings of the Science Teachers' Association of Nigeria, 80-87.
- Omari, I.M. (2011). *Concepts and Methods in Educational Research*. "A practical Guide Based on Experience". DSM: Oxford University Press.
- Owolabi, O. T. (2012). *Effect of Teacher's Qualification on the Performance of Senior Secondary School Physics Students: Implication on Technology in Nigeria*:- Vol. 5, No. 6; pg 1-3. Doi:10.5533/elt.v5n6p72. Canada.
- Paul, A.B. (2001). *Student Performance: an Investigation into the Effects of Social and Physical Factors, and Instructional Resources on the Academic Performance of Advanced Level Accounting Candidates*: Jamaica. Proceeding of the Global Summit on Education; Kuala Lumpur: Paul, S.



- (2011). *Nursing Students' Perception about the Nursing Laboratory as a Teaching Strategy*, USP. Vol. 43 No. esc; USA.
- Revina, A., Mary, G., F. and Caroline, J. (2014). *Test Anxiety Levels of Board Exam Going Students in Tamil Nadu*, Volume 2014. India.
- Richard, E. (2010). *Getting to Scale with Good Educational Practice*. Harvard Educational: Reviewed Journal: Vol.66, Issue 1 pg: 1-27.
- Sabahat Usman, (2012). *Factors Influencing Students' Academic Performance at Higher Secondary Level: Teachers' Perception*. Vol.1; Issue 3. University of California.
- Schwirian, P. M. (1978). *Evaluating the performance of nurses*. *Nursing Research*, 27, 347-351.
- Sifuni, W. (2013). Dissertation on *Determination of poor academic performance in community Secondary School in Tanzania: A Case Study of Kinondoni Municipality*. Dar es Salaam.
- Silverman, D. (2010). *Doing qualitative Research* (3<sup>rd</sup> Edition). London: Cornwall.
- Sujit, S. M. and Kavita, S. (2006). *Factor that affect academic performance among pharmacy student*. *Pham Edu*; 70 (5); pp.104.
- Tanzania nursing and Midwifery Council, (2007). *Standards of Proficiency for Nursing Education and Practice in Tanzania*. (September). Dar es Salaam.
- Tanzania Nursing and Midwifery Council, (2010). *The Nursing and Midwifery Act*, Dar es Salaam.
- Tanzania Nursing and Midwifery Council, (2012). *Licensure Examination Guideline*
- Tanzania Nursing and Midwifery Council, (2014). *Final Nursing Examination Result Handbook*.

Taylor, S. and Maclaughlen, K. (2003). *Self –Care Theory in Nursing*. New York.  
ISBN.0-8261-1725-2.

Thomas, L. (2010). *Student Retention in Higher Education: The Role of Institutional Habits us. Educational Policy*. 51,432-442.

Tomey, A. M. and Alligood, M. R. (1998). *Nursing theorists and their work*. St. Louis: Mosby.

Yolande, N. M. (2011). *Academic Factors Affecting Learning at Nursing College: A thesis submitted at Stellenbosch University: Cape Town*.

## APPENDICES

## APPENDIX 1: Gant Chart

[illegible]

**APPENDIX 2: Budget and Justification**

<b>No</b>	<b>Item Description</b>	<b>Cost</b>	<b>Justification</b>
1	Developing research proposal	100,000/=	For transport and stationeries and refreshment, Printing
3.	Equipment and supplies for data collection	100,000/=	Stationeries, internet services and photocopying of questioners
4.	Pre- test the interview guide to test reliability and validity of the project	100,000/=	For personnel transport allowances and stationeries and refreshment
5	Data collection from the central zone schools of nursing	300,000/=	For per-diem to 2 research assistants Stationary and photocopying
6.	Data analysis	150,000/=	For transcribing and translation of the data and analysis
7	Report writing	500,000/=	Editing, Printing and Binding
7.	Miscellaneous	50,000/=	For unexpected costs
	<b>Total</b>	<b>1,300,000/=</b>	

## APPENDIX 3: Questionnaire for Teaching Staff

**Name of school.....**

**Ownership.....Questionnaire No.....**

## Part One: Demographic Information

Tick the appropriate response

- [illegible]

## Part Two: Factors Influencing Academic Performance in the Nursing Examination

7. Is there set criteria for student admission in your school?

Yes ( ) No. ( )

If YES,

8. How many students admitted per classroom in a academic year

- i). Less than 30 ( )
- ii). 30-45 Students ( )
- iii). 46- 60 Students ( )
- iv). more than 75 students ( )

If No. Give .reasons

- i). .....
- ii). .....
- iii). .....

9. How do you rate the useful status of the existing Nursing Curriculum?

- i). Excellent ( )
- ii). Good ( )
- iii). Average ( )
- iv). Fair ( )
- v). Poor ( )

10. Have ever been involved in curriculum review and development process?

Yes ( ) No ( )

If Yes .what was your opinion on the current nursing curriculum and changes needed

- i). .....
- ii). .....
- iii). .....

If No. Give reason

- i). .....
- ii). .....
- iii). .....

11. What the major methods of teaching you mostly competent and use to teach your students

- i). .....
- ii). .....
- iii). .....
- iv). .....

12. Is your school has relevant instructional materials to effect learning and teaching.

Yes ( ) No ( )

If Yes what type of instructional materials commonly used in teaching your students in this school

- i). .....
- ii). .....
- iii). .....
- iv). .....

13. Do curriculum implementation accomplished in given period of time

Yes ( ) No ( )

If No give reasons

.....  
 .....

14. Do your school has appropriate reference books and library for learning resources

Yes ( ) No ( )

If No where do you obtain teaching materials/references which are currently useful for students

i). .....

ii). .....

iii). .....

15. Is there in place a mechanism for internal supportive supervision

Yes ( ) No ( )

If Yes how often in a year do supervision conducted?

i). Once ( )

ii). Twice ( )

iii). Each semester ( )

16. Is the skill laboratory function at your school? Yes ( ) No ( )

If Yes Explain on how it function?

.....

.....

.....

### **Part three-Trends of nursing education performance**

17. Do student academic performance assessed as per curriculum schedule?

Yes ( ) No ( )

If No. Give reasons

i). .....



ii). .....

iii). .....

If Yes what are the common methods of assessments do you use to assess your students academic performance?

i). .....

ii).  
.....

iii). .....

18. What type of assessments methods mentioned above would you think that could help to improve student academic performance in nursing training?.

i). .....

ii). .....

iii). .....

19. How often do you evaluate your student performance in a week/monthly?

i). Never ( )

ii). Sometime ( )

iii). Very often ( )

iv). Often ( )

20. How do you rate student's performance in continuous assessment evaluations

i). Excellent ( )

ii). Very Good ( )

iii). Good ( )

i). Average ( )

ii). Failure ( )

21. How do you rate your student performances in the final examination?
- i. Excellent ( ) ii. Very Good ( ) iii. Good ( ) iv. Average ( ) v. Failure ( )
22. To what extent do the evaluation results of your student's challenges you to do better?
- i). Very Little ( )
- ii). Some ( )
- iii). Not at all ( )
- iv). Very Much ( )

Give reasons of your answer

.....

.....

23. Do time allocated for curriculum implementation adequately to enhance student academic performance in the final nursing examination
- Yes ( ) No ( )
- If No.
- i). 2 years for certificate and 3 years for diploma
- ii). 3years for certificate and 4 years for diploma
- iii). 4 years for certificate and 4 years for diploma

#### **Part Four-Measures to be taken**

24. What are the challenges facing students nurses in their academic performance in final examinations
- i). .....

ii). .....

iii). .....

25. What would you think could facilitate student's performance in final nursing examination

i). .....

ii). .....

iii). .....

***Thank you so much for your time***

## APPENDIX 4: Questionnaires for Students

**Name of school..... Ownership..... Quest.**

**No.....**

**Part One- Demographic Information- tick your response**

1. Age
  - i. 15 - 19years
  - ii. 20 - 24 years
  - iii. 25-29 years
  - iv. above 30years
2. Sex
  - i. Male ( )
  - ii. Female ( )
3. Secondary level of education?
  - i. Form IV ( )
  - ii. Form VI ( )
4. Passes/ Credits in Science subjects .in your form IV examination results
  - i. Biology.....
  - ii. Chemistry.....
  - iii. Physics.....

## Part Two- Factors influencing academic performance in the nursing examination

5. Do teaching staff have adequate support to you both in classroom and clinical.
- Yes ( ) No ( )

If yes How many tutors currently available

- i. 1-3 tutors ( )
- ii. 4-6 tutors ( )
- iii. 7—10 ( )

6. Do teaching staff have enough time for classroom teaching as well as clinical teaching?

Yes ( ) No ( )

If No, Give reasons

- i). .....
- ii). .....
- iii). .....

7. Which method of teaching or techniques frequently used in teaching and learning?

- i. Individual teaching ( )
- ii. Group Discussion ( )
- iii. Lecture ( )
- iv. Plenary session ( )
- v. Lecture discussion ( )
- vi. Video teaching ( )

8. Which type of examination assessment you think would be effective to assess your performance in the final examination? Give reason for your selection.

- i. Oral Practical and written examination ( )
- ii. Reason.....
- iii. Written examination only ( )

- iv. Reason.....
- v. Practical examination only ( )
- vi. Reason.....

9. Do the school has necessary and conducive learning environment in

- i). classroom Yes ( ) No ( )
- ii). dormitories (living environment) Yes ( ) No ( )
- iii). Clinical areas Yes ( ) No ( )

If Yes, give reasons how do the environment support your learning

- i. ....
- ii. ....
- iii. ....
- iv. ....

10. Is the school library equipped with relevant reference books?

Yes ( ) No ( )

If No Where did you obtain learning materials?

- i. ....
- ii. ....
- iii. ....
- iv. ....

11. Do teacher provide you adequate instructions Yes ( ) No

12. Does given time to practice in the clinical areas and in the skills laboratory enough to affect your performance towards the final nursing examination?

Yes ( ) No ( )

If No, why?

.....

13. Do teachers made regularly follow-up and teaching in the clinical areas?

Yes ( )

No ( )

If Yes how frequencies?

i. Once in a week ( )

ii. Once in month ( )

iii. Once in a semester ( )

iv. During semester practical examination ( )

v. Not seen at all time ( )

14. Do clinical areas has specific and adequate number of experienced teaching staffs to mentor you

Yes ( )

No ( )

If yes How often do they provide support to you:

i. Regularly at all procedure ( )

ii. Twice in a single day ( )

iii. iii. When necessary ( )

v. Never ( )

### **Part two- Questions on trends of nursing education performance**

15. What appropriate evaluation methods best to you that are frequently used in academic teaching and learning?

Type of assessment

Tick Scored grade

i. Individual assignment ( ) A, B, C, D, F

- |      |             |     |               |
|------|-------------|-----|---------------|
| ii.  | Group work  | ( ) | A, B, C, D, F |
| iii. | Test        | ( ) | A, B, C, D, F |
| iv.  | Case study  | ( ) | A, B, C, D, F |
| v.   | Examination | ( ) | A, B, C, D, F |

**Key: .A= 85-100% B= 75-84% C= 65-74% D= 50-64% F= 0-49%**

Give reason that makes you to obtain such performance

- i.....
- ii.....
- iii.....
- v.....

16. 16. Does clinical area equipped with necessary learning materials?

Yes ( ) No ( )

17. Have you come across with difficulties in obtaining course material in your class

Yes ( ) No ( )

If Yes, what are these difficulties

- i). .....
- ii). .....
- iii). .....

18. Do time allocated for curriculum implementation adequately to enhance your academic performance in the final nursing examination

Yes ( ) No ( )

If No.



- i). 2 years for certificate and 3 years for diploma
- ii). 3years for certificate and 4 years for diploma
- iii). 4 years for certificate and 4 years for diploma

**Part three- Measures to be taken**

19. What do you think might be the major cause of student failure in this school/nursing training?

Mention

- i). .....
- ii). .....

20. What would be your suggestion to improve student performance in this school/nursing training

- i). .....
- ii). .....
- iii). .....

***Thank you so much for your time***

## **APPENDIX 5: Interview Guide for Principals and Officials**

**Name of school/Unit..... Ownership..... Interview Guide No.....**

1. Personal characteristics
  - (a) Age.....
  - (b) Position.....
  - (c) Level of Professional qualifications.....
  - (d) Working experiences in current position.....
2. Is there existing nursing education policy and guideline on academic performance for nurse's student in their final examination? (Probe: on how it function).
3. Have you been at any time involved in preparation of nursing curriculum and other instructional material? what was your expertise? (Probe: whether his/her views was accepted and taken on board in the nursing and midwifery curriculum review and development)?
4. What would you explain on your involvement in the existing student selection mechanism and the admission process? (Probe: Whether they were actively involved from the preliminary stages and what they concerning to this practice)
5. How do you facilitate teaching materials availability in nursing schools? What are the main challenges facing education system and general performance of students in final nursing examination at your school? (Probe: whether the curriculum duration is enough? Is there any support from the government?)

6. How can you explain about effectiveness of education evaluation in relation to performance of student nurses in their final examination? (Probe how the process conducted, about the results of current ongoing students,)
7. How do you feel if your students do not perform well in the class and in the final nursing examination? (Probe: about their reactions),
8. What strategies would you think could improve students' academic performance leading to final nursing examination?
9. Do you have anything else that you would like to talk about nursing education practice and its performance in the final nursing examination?

***Thank you very much for your time***

**APPENDIX 6: Observation Checklist**

**Name of school/Unit.....Ownership.....Checklist**

**No.....**

S/N	Checklist on availability of the following	Available &Function	Not Available	Remarks
1	Does school keeps daily classroom attendance register			
2	Does school has schedule of education activity including:- <ul style="list-style-type: none"> <li>• Cum rotation Plan</li> <li>• Classroom time table</li> <li>• Clinical rotation plan</li> <li>• Teaching staff job allocation</li> <li>• Teaching staff clinical teaching</li> </ul>			
3	Does school have functional library. <ul style="list-style-type: none"> <li>• accessible to students</li> <li>• adequate and updated reference books, journals etc</li> <li>• computers with internet connection</li> </ul>			
4	Does school classroom conducive for learning			
5	Do school have functional skills laboratory equipped with necessary learning materials			
6	Does student practice base on prepared procedure checklist in the laboratory room			
7	Do student performance evaluation mechanism in place <ul style="list-style-type: none"> <li>• Evaluation schedule</li> <li>• Evaluation tools</li> <li>• Assessment record book in place</li> </ul>			
8	Do student provided with relevant learning materials (notice)			
9	Evidence of students examination feedback			
10	Do school has various instructional materials			
11	Do school has hostel to accommodate students			
12	Do schools premises have constantly served with social services such <ul style="list-style-type: none"> <li>• Running water</li> <li>• Electricity</li> <li>• Security,</li> <li>• Dining room</li> <li>• Sewage/ waste disposal system</li> </ul>			

## Appendix 7: Clearance Letter

### THE OPEN UNIVERSITY OF TANZANIA

#### DIRECTORATE OF RESEARCH, PUBLICATIONS AND POSTGRADUATE STUDIES

P.O. Box 23409  
Dar es Salaam, Tanzania  
<http://www.out.ac.tz>



26<sup>th</sup> May, 2015

#### To Whom It May Concern

#### RE: RESEARCH CLEARANCE

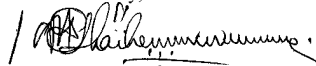
This is to certify that **Ms Happy H. Masenga** has been granted permission to conduct research on **"Factors Influencing Low Academic Performance in Final Nursing Examinations for Certificate and Diploma Nursing Programmes in Tanzania: A Case Study of Eastern Zone"**.

This permission allows her to conduct research in Nursing Schools in **Ilala** and **Kinondoni** Municipalities in Dar es Salaam; and **Morogoro** in connection with this research. This is in accordance with the Government circular letter Ref. No. MPEC/R/10/1 dated 4<sup>th</sup> July, 1980; the Vice Chancellor was empowered to issue research clearance to the staff and students of the University on behalf of the Government and the Tanzania Commission for Science and Technology, a successor organization to UTAFITI.

This permission is granted for the period between **1<sup>st</sup> June to 30<sup>th</sup> July, 2015**.

We thank you in advance for your cooperation and facilitation of this research activity.

Yours sincerely,

  
Prof. Hossea Rwegoshora

For: VICE CHANCELLOR

THE OPEN UNIVERSITY OF TANZANIA

## Appendix 8: Letters of Permission to Conduct Research

Ms Happy Masenga  
TNMC  
P.O.Box 6632  
Dar es Salaam  
28/5/2015

Permanent Secretary,  
MOHSW  
P.o. Box 9083  
DAR ES SALAAM

Dear Sir/Madam

**RE: PERMIT TO CONDUCT RESEARCH IN NURSING SCHOOLS  
LOCATED IN EASTERN ZONE FROM 8TH TO 30<sup>TH</sup> JUNE, 2015**


Reference is made on above heading,

Am a Registered nurse tutor working with MOHSW under Tanzania Nursing and Midwifery Council, currently undertaking studies on Masters in Education Administration Planning and Policy Studies (MEDAPPS) at Open University of Tanzania.

As partial fulfilment of my studies to the Masters award I am required to conduct research. For this reason, this letter serve purpose to request your office for permit to collect data from students in nursing training to second years certificate and third year diploma student nurses, nurse tutors mainly academic and class teachers, Principal and Head of Nursing Sections and Units. The data will be through questionnaire, interview, observation and document review.

Assurance for ethical conduct has been observed and kindly finds the attachment.

Thank you for cooperation.

  
Happy Masenga- RN/RMD/RNT  
PRINCIPAL NURSING OFFICER

CC.

1. Principal – PHN Morogoro
2. Principal – Massana SON
3. Principal - Lugalo SON
4. Principal - Muhimbili SON
5. Principal - A3 Institute SON
6. Principal - Berega SON
7. Principal - IMTU SON
8. Principal – Mikocheni SON

Ms Happy Masenga  
TNMC  
P.O.Box 6632  
Dar es Salaam  
4/6/2015

Registrar,  
TNMC  
P.o. Box 6632  
DAR ES SALAAM

Madam

*Permission granted,  
Registrar TNMC  
4/6/2015*

**RE: PERMIT TO CONDUCT RESEARCH IN NURSING SCHOOLS  
LOCATED IN EASTERN ZONE FROM 8TH TO 30<sup>TH</sup> JUNE, 2015**

Reference is made on above heading,

I am persuing studies on Masters for Education Administration Planning and Policy Guide (MEDAPPS) at Open University of Tanzania.

As partial fulfilment for the studies to achieve Masters award I am required to conduct research. For this reason, this letter serve purpose to request you for a permit to collect data from nursing training schools located in Dar es Salaam and Morogoro regions. It will also include Principals and Heads of Nursing Sections and Units.

Assurance for ethical clearance has been observed through Open University Authority and kindly finds the attachment.

Thank you for cooperation.

*Happy Masenga*  
Happy Masenga  
PRINCIPAL NURSING OFFICER